PEER AND PROFESSOR RELATIONSHIP QUALITY:

A MODERATION MODEL FOR STUDENT PERSISTENCE IN DISTANCE

EDUCATION

by Rayella Stevens

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Philosophy

Liberty University, Lynchburg, VA

2020

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ABSTRACT

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Relationships matter, as hypothesized. This study finds the association between the DE

relationship variables of COI relationships, teaching alliance, student bonding, professor rapport,

and impact of face-to-face learning on DE psychology/counseling graduate students' factors are

significant in relationship bonding environment. The ubiquity of relationships is seen in

educational and social growth contexts within various populations' bonding environments. Our

research further establishes that social contact alliances and interaction are necessary elements

for effective DE in psychology/counselor education. The findings of this DE study is consistent

with psychological research on the associated factors within therapeutic bonding relationships.

Results address whether the direct effect of COI on the intention to persist was contingent in any

way on intensive participation and TA/WA. Only NSSE-Professor was a significant predictor of

intent to persist. This suggests that the relationship between professors and students may be a key

element in students' completion of an educational program.

Acknowledgements

To receive a copy of the author's original acknowledgments page with graphics, or for other correspondence regarding this dissertation, write to Rayella Stevens at RHeidig@liberty.edu.

While the page's graphics and artistic layout are not in the conventional dissertation style they represent my gratitude to all!

Blessings,

Rayella Stevens M.S., Ph.D., LPC

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List of Abbreviations

Advisory Working Alliance Inventory (AWAI)

American Psychological Association (APA)

Classroom and School Community Inventory (CSCI)

Classroom Community Scale (CCS)

Community of inquiry (COI)

Distance education (DE)

National Survey of Student Engagement (NSSE)

Social cognitive theory (SCT)

Therapeutic alliance (TA)

Working alliance (WA)

Working Alliance Inventory (WAI)

Working Alliance Inventory-Short Revised (WAI-SR)

CHAPTER ONE: INTRODUCTION

The student-teacher relationship is foundational to learning at all levels of education (Akyol & Garrison, 2011; Baker, 2003; Benshoff & Gibbons, 2011; Fraley, 2011; Garrison, 2007; Garrison & Arbaugh, 2007; Haythornthwaite et al., 2000a; Horvath & Greenberg, 1994; McCarthy et al., 1990; Rovai & Jordan, 2004; Schlosser & Kahn, 2007). In educational contexts, peer relationships also consistently demonstrate a positive association with persistence and academic performance (Akyol & Garrison, 2011; Benshoff & Gibbons, 2011; Beuchot & Bullen, 2005; Boston et al., 2010; Braxton, 2019; Fraley, 2011; Garrison, 2007; Garrison & Arbaugh, 2007; Haythornthwaite et al., 2000b; Horvath & Greenberg, 1994; McCarthy et al., 1990; Poon, 2013; Rovai & Jordan, 2004; Toste et al., 2010). Presumably, the development of a working relationship bond between graduate psychology/counseling students and their community of inquiry (COI) and with their professors in distance education (DE) will result in positive student educational outcomes: persistence and strong academic performance.

Akyol and Garrison (2011) demonstrated that how something is learned becomes interwoven and inseparable from what is learned, which is of particular interest in DE. While DE exists in many forms, these varying forms may not incorporate the most effective learning paradigm (Akyol & Garrison, 2011; Rovai & Jordan, 2004). The primary focus of this study is to examine how distance learning paradigms facilitate relationship development between peers and professors, and the roles that professor-student rapport and peer-to-peer rapport play in facilitating persistence intention in a sample of graduate counseling and psychology students in a range of DE modalities.

The first foundational proposition of this study is that professor-student alliance relationships are a key component to a graduate student's success. These dynamics of our relationship factor are consistent with the counselor-client therapeutic alliance (TA) intent to persist. Relationship alliance is researched by Horvath and Bedi (2002) as the quality and strength of the collaborative relationship. The alliance is inclusive of the positive affective bonds between client and therapist, such as mutual trust, liking, respect, and caring. Cognitively speaking, this therapeutic relationship alliance consists of joint consensus and action toward the goals and means through which client growth occurs. Therapeutically, both therapist and client are actively committed to specific and appropriate responsibilities in therapy, and cognitively assesses that the other is likewise positively engaged in the process. The alliance is a conscious and purposeful aspect of the relationship.

Alliance involves a sense of joined, enduring relationship in therapy between therapist and client (Horvath & Bedi, 2002). TA is a significant factor within the effectiveness of counseling (Muran & Barber, 2010). Existing research evidences TA's effectiveness (Luczaj, 2010), Alliance is also hypothesized to reflect student growth and learning goals, as seen in their intent to persist towards educational outcomes. Teaching alliance, peer and professor rapport, and face-to-face opportunity allow for the relationship alliance to occur. The relationship factor of students' social bonding and teacher presence in students' community of inquiry (COI) within DE is consistent with the influence of teaching presence upon learning as is to the counselor-counselee relationship's effectiveness. Researchers Norcross (2002a; 2002b) and Safran and Muran (2000) note that the therapeutic alliance is a vital element in successful counseling outcomes. Counseling research applies to psychology/counseling students' counseling career effectiveness.

A correlation model is considered between the relationship factor of students' social bonding and teacher presence in students' COI within DE. This study proposes that the development of a working relationship bond among student peers and between students and their professors will result in positive educational outcomes. Specifically, the outcomes include an increase in graduate psychology/counseling students' intention to persist, and a strengthening of the relationship experience between intensive students and their professors as proposed to be evidenced in the face-to-face relationship validity intensive model of blended DE.

This study proposed that as students' social bonding and teacher presence in students' COI (Akyol & Garrison, 2011; Arbaugh, 2007; Baker, 2003; Boston et al., 2010; Swan et al., 2009) within the working alliance (WA) in DE increase, students will become more satisfied with their educational experiences. This research would benefit the DE field, as it seeks to identify the factors that account for the WA between professors and graduate students' relationships, thereby enhancing their intent to persist and educational empowerment.

WA findings have demonstrated a variety of positive outcomes, as predicted by the quality of relationship or the alliance factors. In this study, existing COI relationship research is expanded to assess educational alliance with both peers and professors to determine the WA relationship between those alliances and students' intention to persist. It is expected WA is linked in this graduate psychology/counseling DE study to students' intention to persist. The COI relationship diagram illustrates the hypothesis.

Figure 1

Theoretical Model
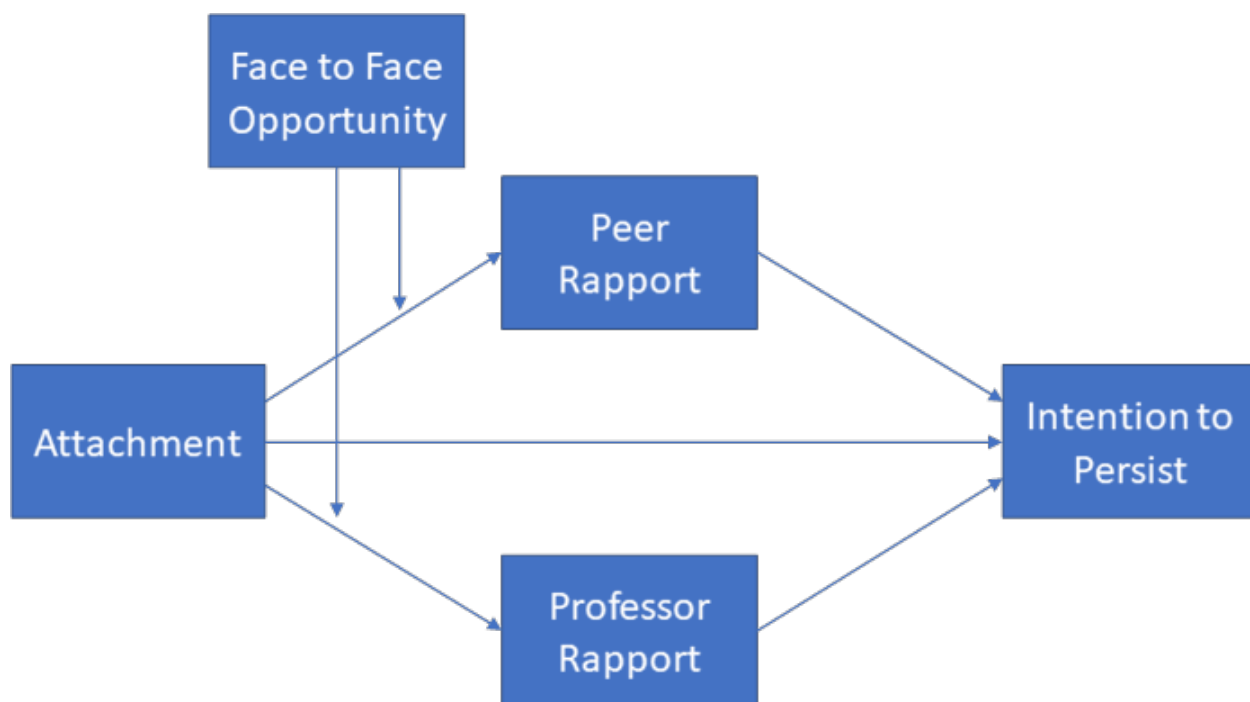
This study hypothesizes that it is not the educational modality, i.e., not the type of education (online, intensive, or residential), but the COI relationship components that improve the WA relationship between peers and professors, which then facilitates positive outcomes for students. More specifically, DE approaches that promote more COI interaction between students and instructors are more likely to yield positive WA relationship outcomes, and consequently, student persistence. The COI relationship components (i.e., attachment via chart) measured were (a) students' and professors' face-to- face opportunity; (b) peer rapport; and (c) professor rapport, correlated with students' intention to persist. Graduate students' rapport with peers and professors was assessed by utilizing the National Survey of Student Engagement (NSSE, 2010).

The definition of the term "distance education" (Keegan, 1980) covers the various forms of study at all levels which are not under the continuous, immediate supervision of professors present with their students in lecture rooms or on the same premises, but which nevertheless,

benefit from the planning, guidance, and tuition of a tutorial organization. More specifically, as relating to this study's population, DE graduate psychology/counseling students' educational model of choice is examined, taking into consideration WA influences within the online, blended, and traditional educational formats.

This study designed and implemented a survey tailored for psychology/counseling students who participate in traditional, blended, or online learning, in either masters or doctoral programs. This survey measures the effect of COI relationships and WA relationships on a student's pursuit of and persistence towards students' degree completion, as related to their model of DE.

Background of the Problem

An ongoing concern of DE study is graduate students' educational intention to persist within the DE learning format (i.e., online, blended, and traditional educational formats; Braxton et al., 1995; Silinda & Brubacher, 2016). Both teacher presence and social presence as COI factors are more likely to exist in the face-to-face blended learning format. Higher education student findings, as cited above, indicate that both academic and social integration are positively influenced by the meeting of expectations for academic and career development. Social integration is positively influenced by expectations for opportunities for personal involvement, but negatively affected by expectations for a collegiate atmosphere, i.e., atypical for a college environment. This study clarifies the need for effective DE.

Silinda and Brubacher's (2016) research related to doctoral students' persistence to degree completion suggested specific improvements needed in DE. Their research recommended improving how supervisors assist distance learning Masters/Ph.D. students, such as in

maintaining regular contact with students, expediting the provision of feedback, and improving clarity in correspondence to help ensure that DE students receive the guidance they require when writing their dissertation or thesis (Silinda & Brubacher, 2016). From the qualitative analysis, it was found that the most commonly reported stressors were a lack of balance, a lack of support, a lack of feedback, and uncertainty.

Poon's (2013) research reviewed the shift in the instructional model as moving from lecture-centered to student-centered interactional model within the learning experience. The student-centered interactional model exemplifies a strong sense of community, as defined by Sergiovanni (1994), rather than as academic organizations, and this community is expanded by Rovai and Jordan (2004). The student-centered interactional model Sergiovanni defined as stressing the need for authentic community in blended learning, a tie binding students and professors, through shared values, ideals, and goals. "Communities, however, are different in that they join people to a purpose, connect people via commitment, not contract, and rely on norms and values over external control measures" (Sergiovanni, 1994, p. 254). This evidence suggests that blended courses are more likely to produce a stronger sense of community among students than fully online courses and quite possibly, traditional learning residential courses.

This study also expands Poon's (2013) research to examine the intensive mode of learning that incorporates a sense of community in COI's teaching presence, social presence, and cognitive presence as associated with students' attending preference versus nonintensive, nonattending online mode of learning. Mode of learning preference and convenience of blended DE are hypothesized as evidencing improved student educational experiences via the learning element of bonding, as measured via the NSSE, Classroom Community Scale (CCS), Working Alliance Inventory (WAI), Advisory Working Alliance Inventory (AWAI), Sense of Community

Index, Classroom and School Community Inventory (CSCI), Student Satisfaction Inventory, social cognitive theory (SCT), and the COI framework consisting of teaching, social, and cognitive presence. CSCI (Rovai, Wighting, & Lucking, 2004).

The American Psychological Association (APA) Steering Committee Task Force 2001's (Golden, 2004) psychotherapy research found in the relationship factor four elements present in successful therapy relationships: Therapeutic alliance; empathy; goal consensus and collaboration; and cohesion in group therapy are the four elements that are consistent with therapeutic growth relationships, correlated with effective group therapy. This study expands the peer-to-peer and professor relationship quality investigation to students' intention to persist in DE degree completion.

As previously discussed, Akyol and Garrison's (2011) work demonstrated that how something is learned is interwoven and inseparable to what is learned. As similar to the counselee via counselor growth experience, a consistent experience is examined between students' growth experience, teaching presence, and students' collaboration experience, as well as, a positive bonding experience. A positive bonding experience measured in the five factors of this study is also consistent in the therapist to client relationship growth (Luczaj, 2010; Norcross, 2001). Similarly, Burlingame et al. (2001) have defined bonding alliances that encompass all these relationships.

This study proposes a link between teachers' presence affecting students' positive learning enhancement and between DE intensive students' bonding experience. This relates to this study's relationship factor of students' educational growth, proposed to be evidenced in their intent to persist in psychology/counseling degree completion. The primary significance of this

study is that it clarifies aspects of relationship quality of teaching alliance between professor and student, and social support between peer to peer that enhance persistence.

These relationship support factors are consistent with previous work on alliance in the counseling relationships of therapist to client and client outside supportive relationships as seen in intent to persist. Lambert and Barley (2001) found these factors of social support equal 40% of client change, and TA equals 30% of client change. These two therapeutic bonding relationship factors account for 70% of the learning and growth experience. Hence, this consistency between therapist and client found in the APA meta-analysis (Luczaj, 2010) conclude effective therapy is not related to the therapeutic school (i.e., cognitive, behavioral training, etc.) or techniques used (cognitive behavioral therapy, emotionally focused therapy), and is more related to the strength and nature of the bonding relationship which builds up between therapist and client (Lambert & Barley, 2001).

Statement of the Problem

I propose that with more effective DE learning processes, concurrent with community and relationship factors, higher rates of DE persistence are likely. This research would benefit the DE field because identifying the factors that affect educational alliance is hypothesized to determine educational outcomes. Thus, identifying the factors that account for the WA between professors and graduate psychology/counseling students, if associated with students' intention to persist, would reflect a higher likelihood of student retention and graduation. Rovai and Jordan (2004) noted Tinto's research (Braxton, 2019) arguing that a lack of interactions between graduate students with peers, professors, and students with differing values is likely to result in

dropouts. In other words, students who feel isolated or not bonded with other students have a low sense of community, and are at risk of becoming dropouts (Braxton, 2019).

As previously noted, the interaction of how and what in learning are inseparable and interwoven (Akyol & Garrison, 2011). The most effective elements in the alliance relationship include how students learn and persist in their education via social support and teaching presence as consistent with established psychotherapy alliance research. This is hypothesized in the educational alliance relationship success. DE students' intention to persist toward degree completion is measured in this study as relationship effectiveness affected by the factors of WA, social support, and teaching presence. Similarly, this study examines DE learning in both WA and TA.

Additionally, Rovai and Jordan's (2004) research suggests that students' attrition is due to lacking a sense of community, resulting in student burnout (McCarthy et al., 1990) and feelings of isolation (Haythornthwaite et al., 2000b; Morgan & Tam, 1999). This study attempts to address this lack of community and subsequent student dropout by identifying four factors that lead to an effective learning environment correlated with students' intention to persist with their DE. COI theory and SCT support students' DE learning factors and bonding attachment as measured via the surveys NSSE, CCS, AWAI, and CSCI, Sense of Community Index, and Student Satisfaction Inventory.

The SCT and the COI framework consist of teaching, social, and cognitive presence. In summary, this study examines the four relationship variables of COI: relationship bonding, (i.e., attachment), peer rapport, professor rapport, and the impact of face-to-face learning. Examining these four variables will address DE graduate psychology/counseling students' continuance of degree pursuit and future likeliness as institutional benefactors.

Purpose of the Study

The purpose of this study is to explore the association between the DE relationship variables COI relationships, student bonding, professor rapport, and impact of face-to-face learning to address DE psychology/counseling graduate students' intention to persist in their graduate education as accounted for by WA. These variables will be considered within research questions and theoretical models of COI and SCT. Research supporting TA and WA components is consistent with positive outcomes of relationship factors.

This study purports to ask the right questions as surveyed to address the right factors of COI/SCT/WA relationships linking students' goal furtherance. This study asks the right questions on DE relationships rapport and bonding environments to solve human problems of unity and students' persistence to goal. As surveyed, this study reflects the importance of asking the right questions as GK Chesterton is known for his life theories (Guroian, 2002) observing that there are no right answers to wrong questions. Chesterton links his problem-solving theory reflecting it's not that humans can't see the solution, but that they can't see the problem.

The value of COI relationships is further examined, and within this study may be found to offer social support within peer-to-peer and professor-to-student learning environments. This study also reflects the effectiveness of modalities of DE and presents evidence that supports the blended learning intensive mode of DE as superior to online learning.

Additional research reviews this study's dependent variable Intent to Persist by examining the literature on factors in persistence and retention of DE graduate students. The relationships and academic persistence success are considered to be associated with the online

and blended DE modalities within the relationship factors described in COI, SCT, and WA theories.

This study surveys graduate psychology/counseling students to examine retention rates within the intensive model of DE. Graduate counseling students' educational model of choice is hypothesized as (a) related to their surveyed bonding experience (b) linked to students' educational intention to persist, and (c) indicative of likeliness as future institutional benefactors. The retreat component and convenience of blended DE are hypothesized as evidencing improved student educational experiences via the WA element of bonding attachment. These components are measured and referenced below via the COI and SCT framework consisting of teaching presence, and social and cognitive presence. These factors are hypothesized as affecting students' intention to persist and positive retention rates, as well as likeliness as future institutional benefactors.

This literature review establishes factors of persistence and retention of graduate students' intent to persist in DE. Relationships (five factors) are associated with persistence and retention within DE populations as evidenced in COI, SCT, and WA relationship theoretical models. As generally shown, persistence and retention factors of student performance and satisfaction in online and face-to-face modalities do not significantly differ with courses using pedagogically sound practices, or influence attainment of goals such as intent to persist (Driscoll et al., 2012). In Driscoll et al.'s (2012) research, teacher alliance is briefly assessed as academically weaker when students are more reliant upon their instructors and require a higher degree of interaction with them. Provided that both types of courses allow for similar interaction with professors, the negative results are an insignificant finding.

Research examines the recent growth of DE (Chmura, 2016). This study examines the influence of WA relationships in online and blended DE modalities as associated within the relationship factors and academic influence of persistence and retention. In-class educational success is compared to online and face-to-face opportunity learning modalities (Driscoll et al. 2012; Larson & Sung, 2009). Student performance and satisfaction is also reviewed. This study considers the PR Intensive modality of learning, incorporating both online and face-to-face opportunities, showing the results of graduate psychology/counseling students' intent to persist.

Retention results for online courses (James et al., 2016) find, contrary to popular press, that in research students taking some online modalities, retention rates were similar to those taking face-to-face modalities. However, retention rates were less for students taking exclusively DE online modalities than those taking blended or traditional modalities. These findings support Intensive modalities as having superior retention factors. Their research also supports Intensive modalities by evidencing that compared to mainly online and traditional institutions, students in blended modalities had better odds of persistence and retention.

The NSSE (2010) supports student retention and emotional support as bonding factors in student services (Whiteman et al., 2013). The student engagement factor, as the NSSE supports, is also reflected as a PR factor in community value, as researched by Devlin et al. (2008). This factor is also linked to the strength of Intensive modality learning within this study's five factors of relationship effectiveness in students' intent to persist. Furthermore, research supports intensive DE as linked to traditional learning and the on-campus lifestyle (Graham et al., 2018).

The intensive mode presented in this study involves student engagement similar to life on campus. Weekly interaction of DE students involves full-time participation in face-to-face learning in class and social activities, such as luncheons or going out to dinner. This DE

environment is unique to intensives and allows opportunity for social bonding with peers and building professor rapport; two of the five factors leading to students' intent to persist.

Research by McCabe (2016) and McPherson et al. (2001) also support findings that friendships matter for academic success and students' intent to persist. These researchers find a similarity in the sociality component within the homophily of students, as in the adage "birds of a feather flock together." This similarity encourages friendship propinquity of bonding formation. This bonding formation research shows specifically that the influence of institutional retention climates, as the intensive DE modality examples, leads to student persistence to degree completion (Oseguera & Rhee, 2009).

Social presence and teaching presence of COI relationships enhancing WA may show as significant factors in perceived learning in DE, students' educational intention to persist, and likeliness of becoming future institutional benefactors. This study implements a survey to see if these relational factors also influence DE students' learning persistence to degree completion. As examined, learning relationships are the first step in being able to apply new information to aid students' growth modeling students counseling professions, Also, the purpose of this study has a broader significance as the ubiquity of this relationship's theory on COI relationships affecting all aspects of life is examined and applied to all effective growth areas of all peoples. Specifically, its ubiquity of relationship growth is suggested as needing future research in the church community and substance abuse population.

This literature review notes research to establish COI and SCT in successful formats of DE counselor education, (i.e., online, blended, and traditional educational formats), Therefore, this study presumes that in addition to the relationship offered via teaching presence, social and

cognitive presence also influence graduate psychology/counselor students' choice of educational model (i.e., online, blended, and traditional educational formats).

Lastly, WA research is presented supporting counseling skill development from the supervisor to the counselor trainee. This study purposes to examine that in WA the most effective elements in the alliance relationship include COI teaching presence dominance, followed by social presence and cognitive presence (Akyol & Garrison, 2011; Arbaugh, 2007; Baker, 2003; Garrison et al., 2000). Teaching presence is researched to be prioritized over social and cognitive presence.

Benshoff and Gibbons's (2011) research article reviews the literature on the effectiveness of computer-mediated communication. The article notes that e-mail, PowerPoint presentations, and online grading are accepted asynchronous communication modes within counselor education. Their research provides an example of how online synchronous discussion (OSD) is one approach to computer-mediated communication that includes a range of activities which occur online in real time, such as chat and instant messaging. Online synchronous discussion combined with the asynchronous use of Blackboard have been used effectively in counselor education, as these technologies allow student counselors to have conversations much as they would if they were physically in the same space. Benshoff and Gibbons's (2011) research finds that the synchronous combined with asynchronous approach has worked particularly well with more advanced students where their traditional coursework prepared them with fundamental counseling knowledge and skills. Their research evidences a belief that a COI can be established effectively in an online synchronous discussion format, and that is consistent with the elements of teaching that counselor educators hold dear—social contact and interaction—can be created successfully in an online environment.

As related to the purpose of this study, Benshoff and Gibbons' (2011) research further establishes and extends COI research beyond the online environment, associating social contact and interaction as the necessary elements for effective DE in counselor education. This study links the added element of face-to-face contact as a significant outcome factor. The face-to-face contact and interaction element is hypothesized as influencing and motivating graduate students' intent to persist in DE psychology/counselor graduate education.

Research Questions

There are four DE research questions that are the focus of this investigation. First, what is the relationship between COI elements and NSSE subscales related to peer rapport and professor rapport? Second, how do the elements of COI and the NSSE rapport subscales relate to intention to persist? Third, how does the DE modality of the online and face-to-face intensive format either attenuate or strengthen those relationships? And finally, how do teaching alliance and face-to-face interactions affect COI student relationships?

Figure 2

Final Theoretical Model
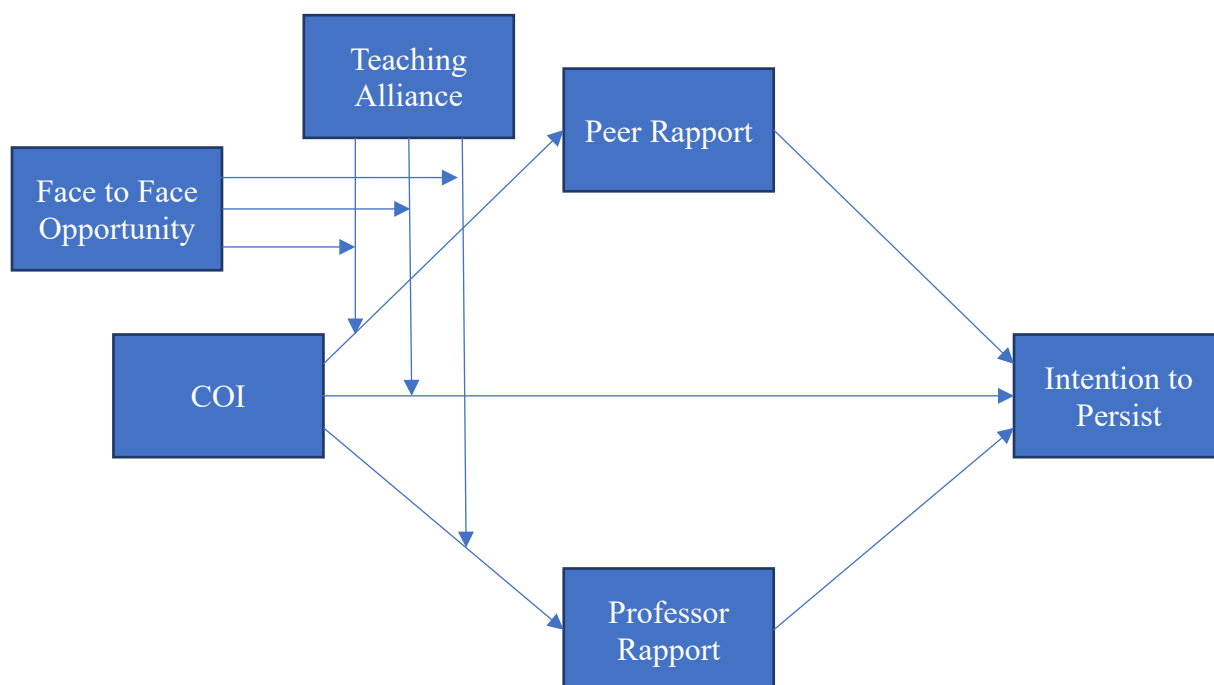
Professor rapport, i.e., COI's teaching presence, provides leadership throughout the course of study and, as previously noted, has been described as "the binding element in creating a community of inquiry for educational purposes" (Garrison et al., 2000, p. 96). Research suggests teaching presence should be prioritized over social and cognitive presence (Akyol & Garrison, 2011; Arbaugh, 2007) within the COI learning model. The present study attempts to clarify the nature and effect of these variables.

Furthermore, how do NSSE subscales relate to peer rapport and professor rapport? The index "Faculty Accessibility," i.e., professor rapport, is minimally significant. The indices "Social Engagement," i.e. peer rapport, is found to be a significant predictor of college freshman retention.

Second, how do the elements of COI and the NSSE rapport subscales relate to intent to persist? The link between COI elements of Teaching, Social, Cognitive presence and NSSE's 11

Indices measuring student engagement found significant predictors among higher education students' retention, i.e., Intent to Persist. COI's Social presence and NSSE both indicate Social Engagement as a significant predictor of Intent to Persist.

Does teaching presence influence graduate psychology/counselor students' choice of educational model of learning (i.e., online, blended, and traditional educational formats), as related to students' COI and SCT? As previously stated, Poon's (2013) research reviews the shift in the instructional model as moving from lecture-centered to student-centered interactional model within the learning experience. COI is researched as a successful non-traditional educational learning factor, with Arbaugh (2007) noting a priority among the COI elements: social presence ranks over cognitive presence in higher-order learning. With teaching presence already established first in priority (Arbaugh, 2007; Garrison et al., 2000; Poon, 2013) as a binding element of COI, social presence is needed to establish cognitive presence.

Third, how does the DE modality of the online and face-to-face intensive format either attenuate or strengthen those relationships? This study expands Poon's (2013) and Arbaugh's (2007) research by asking this research question. Research evidences the priority of teaching and social presence necessary for COI cognitive presence learning to occur. Therefore, this study hypothesizes that the student-centered COI factors of teaching presence and social presence are established within the community model of DE. It follows that this research question asks: Do students prefer attending a student-centered interactional learning mode versus nonintensive, a nonattending online mode evidenced within the intensive, or a retreat component and the convenience of blended DE?

A final research question summarizes this study's hypothesis: Is a sense of community DE relationships felt within the learning environment, and does it affect students' intention to

persist and likeliness as future institutional benefactors? The NSSE (2010) research expands

students' retention results as greater than students' institutional benefactors. These research

questions assess graduate psychology/counseling students' relationship bonding and growth to

ultimately enhance their educational effectiveness.

Tatkin's (2009) research suggests that relationships of support save one's intent to

persist. Individuals are helped by people and we are hurt by people, and the medicine is the

relationship. Applied educationally and therapeutically, a student's career to help others grow

and heal is to project secure rapport and bonding relationships, as exampled between professor

and student. The environment heals, as educational growth and psychological healing cannot

occur where all are wounded.

The following independent variables are included within this study: COI, face-to-face

opportunity, teaching alliance, peer rapport, and professor rapport. The dependent variable is

students' intention to persist toward degree completion.

Assumption and Limitations

An assumption of this study is that the participants recruited through the university

graduate psychology/counseling DE student populations are representative of the broader

population of psychology/graduate counseling DE students in the United States. It is also

assumed that Liberty University's higher education graduate psychology/counseling curriculum

is representative of DE models of blended, online, and traditional learning environments.

This study does not follow a longitudinal design; it utilizes a correlational design and

cross-sectional sampling. Therefore, it is not possible to test causal relationships between the

variables. Also, as a method limitation, the survey developed for this study employed the use of

empirically validated measures of the independent variables presumed to affect the dependent variable of graduate psychology/counseling DE students' intention to persist and their likeliness as future institutional benefactors. The results obtained in the present study are limited to a single, private university The survey methodology is limited by results dependent upon the openness and honesty of the participants, which may have some degree of error due to difficulty remembering the foci assessed within each surveyed course relationship due to related time factors. These issues raised concerns regarding statistical conclusion validity and were considered when reviewing results.

The ability to generalize findings beyond the present study is limited because the surveyed DE graduate psychology/counseling population was at the same university. No other universities were sampled. The DE learner characteristics, DE program factors, and pedagogy DE model in the present study may not be representative of other universities' DE models. Also, the blended learning Intensive model may not generalize findings to other educational formats, as the Intensive model of DE may not be available at other DE universities. Furthermore, traditional education formats may need to be considered in future research as LU had limited available population at the time of survey to assess relationship as a valid IV, associated with graduate psychology/counseling students' DV: intention to persist. Additionally, the researchers exercised no experimental control over the courses examined in the present study, and cause-and-effect relationships were appropriately not confirmed.

This study is a correlational study. To avoid selection bias as a threat to internal validity, random assignment was not employed in these method types. Selection bias is a limitation due to selection history events, such as political events in time affecting one group versus another, which may sway students' participation at the time of survey assessment. Furthermore, this

study's methods do not utilize control groups, which allows for a history/maturation/testing threat to its internal validity.

The accuracy of this study's survey results depends upon graduate psychology/counseling students' memory of their DE face-to-face program, and peer and professor relationships. Therefore, history is noted as an internal threat to validity, as environmental stressors, such as weather events, study stressors, news, and world crises may have occurred, causing the invalid memory of relationships.

External validity threats of stimulus characteristics and settings, the reactivity of the experimental arrangements, and timing of measurement are considered as possible limitations to this study. Each group's survey environment must be held constant upon participation to avoid stimulus characteristics and settings as an external validity threat to avoid a Type II error, i.e., claiming relationships were not a valid factor for DE students to persist, yet these DE relationships were correlated. This study's survey was emailed to each student, thereby controlling for stimulus characteristics and experimental settings as an experimental threat. However, students may be more engaged from one institutional setting, or emailed survey participation conditions may not be similar in quietness; therefore, stimulus characteristics and settings may not be able to be controlled between all groups to avoid a Type II error. This study may be limited to this student sample, thereby being a threat to external validity.

To avoid the reactivity of the experimental arrangements, survey participants must avoid giving responses to look good to obtain the rewards. The survey offers participants benefits/rewards just by participating, thereby holding motivation levels constant to avoid threats to external validity. However, students may still be affected by a desire to respond favorably and not reflect real life. The COI change presented in this study may affect this COI's application

method within this institution, thereby allowing for a Type I error if the COI method of application is not similar to other institutions. Finally, the timing of measurement may be found to be an external validity threat if long-term follow-up may not be seen, yet significant survey results are found. This would be apparent if graduate psychology/counseling students did not persist to contribute as future institutional benefactors.

Definition of Terms

Blended education – A hybrid of traditional face-to-face and online learning so that instruction occurs both in traditional classroom formats and is followed by extended learning online (Collis & Moonen, 2012).

Cognitive presence – According to Akyol and Garrison (2011), cognitive presence is recognizing a problem or a puzzlement and exploring it. The highest level of cognitive presence is the resolution phase of problem solving, and vicarious application to the real-world.

Community of inquiry – Shahrtash (2017) reviewed and defined the history and development of COI terminology. John Dewey assumed that reflection births learning, thus called critical thinking, later referred to as higher order thinking, including creative thinking. Presently, the term "community of inquiry" is defined as both cognitive and affective processing. It includes both insights and empathy aiding students' competent judgments. Three core factors of teaching, social, and cognitive presence are indicators of COI learning.

Distance education – The term "distance education" covers the various forms of study at all levels which are not under the continuous, immediate supervision of tutors present with their students in lecture rooms or on the same premises, but which nevertheless benefit from the planning, guidance, and tuition of a tutorial organization (Keegan, 1980)

Intensive education – as modified blended learning involving comprehensive usage of the internet (asynchronous), while engaging in students' bonding experience (synchronous) within the face-to-face retreat effect of one week, on-campus stays per semester course (Benshoff & Gibbons, 2011).

Internal working model – A mental representation, or working models, of the self and significant other based on their interpersonal experiences. It is a core assumption seen in the adult attachment theory (Fraley et al., 2011).

Online education – Comprised mainly of online courses, online education is defined as having at least 80% of the course content delivered online (Allen & Seaman, 2005).

Social cognitive theory – Affecting perceived usefulness and behavioral intention, as applied to the blended education format (Davis et al., 1989). The self is socially constituted, but by exercising self-influence, individuals are partial contributors to what they become and do. As related to this study, students observe others within the context of social interactions, experiences, and outside media influences (Erlich & Russ-Eft, 2011).

Social presence – The development of interpersonal relationships in the educational community and its social climate (Akyol & Garrison, 2011).

Teaching presence – According to Akyol and Garrison (2011), leadership throughout the course of study and is considered a binding element in creating a COI for educational purposes (Garrison et al., 2000).

Therapeutic alliance – According to Castonguay et al. (2006), the interactive, collaborative elements of the relationship in the context of an affective bond. It is the alliance between therapist and client which establishes a bond to allow the therapeutic work to ensue (Muran & Barber, 2010).

Traditional education – Course content is delivered in writing or orally with face-to-face instruction, with zero to 29% of the course content delivered online (Allen & Seaman, 2005).

Working alliance – A refined measure of the TA that assesses the joining relationship of tasks, goals, and bond. Specifically, WA assesses (a) agreement on the tasks of therapy, (b) agreement on the goals of therapy, and (c) development of an effective bond (Munder et al., 2010). WA refers to the quality and strength of the collaborative relationship (Horvath, 2001). Horvath reviews research that supports the WA between therapist and client, describing the affective bonds between them. The positive affective bond, i.e., the emotional components, is researched, inclusive of mutual trust, liking, respect, and caring. The alliance encompasses the cognitive components of the therapy relationship using the three Cs of therapy: consensus about, commitment to, and conclusion of the goals, i.e., results desired via therapy outcome.

Furthermore, the alliance relates that these goals are achieved via agreement and commitment to a partnership alliance dedicated to reaching clinical effectiveness of therapeutic joining. Horvath and Bedi's (2002) alliance research found that the alliance is a conscious and purposeful aspect of the relationship between therapist and client. Additionally, as related to relationship alliance effectiveness, Norcross (2001) indicated a specific therapist behavior (e.g., alliance, empathy, support, collecting feedback) that is linked to improve treatment outcomes. Norcross' (2011) more recent research repeats the supportive alliance factor findings.

Working Alliance Inventory – A reliable measure of alliance with three unique subscales that measure the WA (Horvath & Greenberg, 1989, 1994). For this study, the WAI examines the emotional bond, task, and goals of the teacher-student relationship and how these goals can be achieved.

Significance of the Study

DE is not in need of another study comparing the method of traditional classroom teaching to the online method or the more recent blended learning model of education. However, it needs to consider what has worked most effectively in DE relationships of growth. These DE relationships of growth are seen most effectively in the WA variable, as reflected and measured in the COI bonding relationships, between and among professor and students. Otherwise stated, it is the educational alliance that determines educational outcomes, as proposed to be seen in DE students' intention to persist as accounted for by the WA between and among professors and students.

Theoretical and Conceptual Framework

This study examines educational alliance as a model for relationship as a facilitator of success in educational outcomes. The most effective elements of learning related to a WA framework are supported by the theoretical underpinnings of COI (Akyol & Garrison, 2011) and SCT (Erlich & Russ-Eft, 2011).

The framework of COI is founded upon social presence as one of the elements for developing community and the pursuit of inquiry in blended learning. Social presence exemplifies the development of interpersonal relationships in the community and its social climate. The other two COI elements of teaching and cognitive presence are also examined to support the intensive learning model (Akyol & Garrison, 2011). Bandura (1997) referred to SCT as human action which is largely determined by self-efficacy beliefs, outcome expectations, and self-regulated learning. Social environment mutually influences, but only partially accounts for, behavior. As applied to this study, SCT indicates that portions of students' knowledge

acquisition can be directly related to observing peers and professors within the context of social interactions, experiences, and outside media influences.

The DE research survey considers various types of DE contexts as it monitors students' WA within the online, blended, i.e., intensive, and traditional educational formats. Considering each of these contexts definitionally, online courses are defined as having at least 80% of the course content delivered online (Allen & Seaman, 2005). Blended education, defined by Moore and Kearsley (2011), describes a mix of traditional classroom time and online support.

Intensive education consists of modified blended learning involving comprehensive usage of the internet (asynchronous), while engaging in students' bonding experience (synchronous) within the face-to-face retreat effect of one week, on-campus stays per semester course. Rovai and Jordan's study (2004) notes that social presence inherent within the blended learning paradigm allows graduate students and their professors the benefits of COI teaching presence and cognitive presence of educational discussions, with added face-to-face interactions, while enhancing the limited text-based interpretations of traditional or online only paradigms. Rovai and Jordan's research is furthered in this study by measuring the students' intention to persist toward educational fulfillment via the students' COI relationship bonding paradigm developed via face-to-face opportunities of both peer support and professor rapport.

Further benefits of Rovai and Jordan's research (2004) found that the graduate students preferred the blended paradigm with weekend classes for its convenience while working, rather than the traditional or strictly online learning paradigms. This blended paradigm of DE still maintains its convenience with blocked time units inherent with the week-long, retreat effect of the intensive model. With this style of blended learning, the students can build community structure and professional contacts with the freedom of the online experience still providing time

management. This dissertation study also proposes a link between COI teaching presence rapport positively enhancing student learning, and between student bonding experiences as proposed to be evidenced in the face-to-face relationship rapport blended model of learning.

The various DE paradigms reviewed (e.g., online, blended, and traditional) are surveyed to measure the COI WA relationship affecting graduate students' intention to persist. The COI WA relationship among peers and professors is hypothesized to be consistent with students' educational outcomes intent to persist.

COI learning enhancement is examined to influence students' institutional intention to persist via this study's survey that measures WA relationship between student to student bonding, as well as teacher to student rapport. This WA relationship is hypothesized to be associated with positive psychology/counseling graduate student educational outcomes of persistence and academic performance. The theoretical framework of COI and SCT is further evidenced to model COI relationship bonding between students and teachers WA (Chapman et al., 2009). This rapport factor revealed that the WA between counselors-in-training (CITs) and their clients predict therapeutic outcomes (Horvath & Symonds, 1991; Parish & Eagle, 2003). The significance of the WA relationship in academic performance has predicted students' as CITs therapeutic outcomes as assisted by peer and professor COI rapport.

Furthermore, survey results reflect peer and professor WA rapport as an influencing outcome factor of intention to persist. Also correlated to TA and WA personality rapport, Tatman's research , 2005, utilizes the five factors of personality measured by the NEO five-factor inventory (NEO-FFI) Costa & McCrae (1992) to consider the degree to which counselors' personality traits and family-of-origin descriptors are associated with WA

evaluations. Likewise, Rovai and Jordan's (2004) extrovert and introvert personality research is also suggested to be associated with students' WA outcomes.

The counseling model examines therapeutic effects (Castonguay et al., 2006) utilizing the WAI. The WAI examines the psychotherapeutic relationship (Horvath & Symonds, 1991). A critical aspect of the WAI considers bonding within the clinical relationship that represents the emotional component of the relationship, consisting of positive attachments based on mutual trust, liking, respect, and caring (Horvath, 2001). Alliance also encompasses more cognitive aspects of relating, including the goals established in collaboration between bond, task, and goal, and how these goals can be achieved.

Munder et al. (2010) further utilized the Working Alliance Inventory-Short Revised (WAI-SR). This is a 12-item measure for the assessment of the TA. The WAI-SR captures three key alliance aspects: (a) agreement on the tasks of therapy education, (b) agreement on the goals of therapy education, and (c) development of an affective bond. Both outpatient and inpatient populations are utilized while examining the WAI-SR's psychometric properties. Findings indicate the WAI-SR can be endorsed for alliance assessment in both settings. The WAI-SR is ready to be used by psychotherapists interested in the TA.

Chapter One Summary

Chapter One is an in-depth investigation of DE on the topics of bonding and rapport relationships (i.e., attachment) and growth as seen in the learning environment of counseling and COI educational research literature. The dependent variable of this causal study, graduate psychology/counseling students' intent to persist, is linked by the peer and professor relationship. Intend to persist outcome is evidenced by the fact that we are modifying the COI relationship

factors. It is hypothesized that the relationship is the most effective part that makes counseling work and education work. This study's purpose modifies the COI scale to measure teaching, social, and cognitive presence in a more effective way. We present research supporting this information and proposed relationship change model in Chapter One.

Relationship significance associates five factors: COI; teaching alliance; face-to-face opportunity; professor rapport; and peer rapport with persistence and retention in graduate education students' intent to persist outcome within DE populations. The most effective elements of learning related to a WA framework are supported by the theoretical underpinnings of COI (Akyol & Garrison, 2011) and SCT (Erlich & Russ-Eft, 2011).

The framework of COI's teaching, social, and cognitive presence are founded upon the elements for developing community and the pursuit of inquiry in blended learning. Social presence exemplifies the development of interpersonal relationships in the community and its social climate. The other two COI elements of teaching and cognitive presence are also examined to support the intensive learning model (Akyol & Garrison, 2011).

The significance of this study summarizes this study's hypothesis. Is a sense of community relationships felt within the learning environment, and as surveyed, does it affect students' intention to persist, as well as likeliness as future institutional benefactors? The NSSE research (2010) expands students' retention results as greater than students' institutional benefactors. These research questions assess graduate psychology/counseling students' relationship bonding and growth to ultimately enhance their educational effectiveness within their psychology/counseling professions.

CHAPTER TWO: REVIEW OF THE LITERATURE

Chapter Two is an in-depth exploration on the topics of bonding and rapport relationships (i.e., attachment) and growth as seen in the learning environment of counseling and COI educational research literature. The independent variables of face-to-face opportunity, peer rapport, and professor rapport are explored and discussed to determine the weight of COI relationships as a significant factor present in DE models, as affecting their intention to persist in DE. Chapter Two's purpose incorporates both biblical and social relevance of this study's bonding principle while extending the power of bonding to aid other relevant populations as related to this study's DV goal obtainment.

Educational Alliance Relationship Model's Educational Success Outcomes

Davis et al. (1989) defined SCT as affecting perceived usefulness and behavioral intention (based on SCT). Social influence is therefore, as applied to the blended education format, theorized to significantly enhance the intensive education model of DE. The framework of COI is founded upon social presence as one of the elements for developing community and the pursuit of inquiry in blended learning. The other two COI elements of cognitive presence and teaching presence are also examined to support the intensive learning model.

When comparing traditional and online graduate courses to blended learning courses, WA and learning are measured via the CCS by Rovai and Jordan (2004). The CCS Likert scale results show a community connectedness and learning within the blended learning format (Rovai, 2002). Furthermore, the CCS research describes blended learning as an opportunity that

offers students, who may be working adults desiring postsecondary degrees, both flexibility and convenience.

Schlosser and Gelso (2001) found rapport as a supporting factor in WA from the perspective of both graduate students and advisors. This relationship factor of rapport found prominence in evidence-based learning requiring a personal experience, not just a cognitive experience. Teaching presence followed by social presence leads to cognitive presence (Arbaugh, 2007). As Arbaugh (2007) relates COI research, social presence allows learning relationships so that, "to feel it is to heal it". Based upon this learning factor of growth, students transport their experiential therapy skills, learning to aid their clients' healing element of psychological growth. Otherwise stated, and as evidenced in the COI elements, learning in the head, cognitively, does not reflect students' or clients' growth as experiential heart change. This study surveys DE students' social experience leading to educational outcomes via DE teaching; social and cognitive COI relationship applications are proposed to reflect students' intention to persist in goal obtainment.

Utilizing a modified WA scale of the AWAI, a positive correlation is noted between the AWAI and students toward their perceived expertness, attractiveness, and trustworthiness of their advisor (Schlosser & Gelso, 2001). These findings are also seen as effective teaching presence descriptors (Baker, 2003) considered in this study. Arbaugh's (2007) research also prioritizes teaching presence as the most important factor of student learning, followed by social presence, then cognitive presence.

The blended model of learning, exemplified in the intensive model of DE, allows students' face-to-face teacher presence and social presence via the expanded visits outside of classroom time meetings, more so than the traditional and online models of learning. Further

establishing the importance of this study, evidence shows that WA is enhanced via teaching presence as students associate professors' personal attributes leading to educational development in DE. These DE learning factors may enhance graduate psychology/counseling students' desire to continue with a specific education model.

Personality factors are noted in COI and are reviewed by Benshoff and Gibbons (2011), incorporating asynchronous and synchronous teaching approaches to learning. By requiring students to engage in verbal online class communication, cognitive presence is addressed. Cognitive presence in COI is experienced as students' personality traits of extroversion versus introversion affecting their online classroom presence. Benshoff and Gibbons's (2011) research found that with this expectation of active verbal participation online, many students are challenged to modify their usual classroom style. For instance, introverts who might be hesitant to share comments in a traditional class often excel online. Conversely, strong extroverts can feel constrained online by having to compose their comments and keep them shorter and focused. Students quickly adapt to this change and most tend to be active in every class meeting. Cognitive presence in COI is established in research, as cited above, to support the introvert and extrovert personality traits affecting students' choice of educational model.

Rovai and Jordan's (2004) research findings support that personality factors affect graduate students' choice of preferred DE. Introverted graduate students felt a stronger sense of community and social presence in the blended course, whereas in the traditional course however, they felt isolated and frustrated having the dominant, more vocal, extroverted graduate students monopolize discussions. Comparatively, in fully online courses requiring technological ability and professor reinforcement, some of the introverted graduate students felt uncomfortable communicating with peers and professors online. Therefore, they were not fully satisfied with

the online courses and felt isolated, preferring the periodic, combined face-to-face ease within the blended composition of teaching, social, and cognitive interaction.

McMillan and Chavis (1986) offered the following definition of sense of community: "a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" (p. 9). Many studies are cited supporting their finding of the blended course generating a stronger sense of community without the isolation complaint repeatedly noted of fully online courses (e.g., Braxton, 2019; Haythornthwaite et al., 2000a; Morgan & Tam, 1999).

Rovai and Jordan's (2004) research examines the extroverted personality style graduate students. The study found that extroverted graduate students are dependent learners, who also felt a strong sense of community within the blended course. Most students having demonstrative (extroverted) styles of personality noted their frustrations with fully online courses requiring greater self-regulation. These students complained of lacking professor contact for teaching presence and guidance and needing more frequent direction and reinforcement. Students also experienced isolation due to lack of social presence within face-to-face peer interaction.

Rovai and Jordan's (2004) research also supports blended or traditional courses over fully online courses. Blended and traditional courses mostly avoid the online detriment of student-professor miscommunications. With online-only courses, teaching presence and social presence miscommunications may be linked to the absence of visual or social cues and lacking visual analyses aids such as professor diagrams to illustrate complicated information. This DE study purports the intensive education model as evidencing effective COI learning processes of teaching, social, and cognitive presence.

COI research supports blended education having teaching presence, social presence, and cognitive presence (Akyol & Garrison, 2011). Teaching presence provides leadership throughout the course of study. Clearly, there is a critical need to establish a strong teaching presence, since this has been defined as "the binding element in creating a community of inquiry for educational purposes" (Garrison et al., 2000, p. 96). Akyol and Garrison's (2011) research also found that creating a climate for open communication and building group cohesion are essential for productive inquiry. Cognitive presence is defined as leading to the resolution of a problem via the pursuit of inquiry. Akyol and Garrison conclude that cognitive presence in a COI is strongly associated with high levels of perceived learning in both online and blended learning courses.

Three more studies support COI as the main indicator of successful non-traditional educational learning. Garrison and Arbaugh (2007) presented COI elements (i.e., social, cognitive, and teaching presence), categories, and indicators. An additional study by Arbaugh (2007) also established that social presence is necessary for the development of cognitive presence. As per researchers Swan et al. (2009), social learning is one of the required factors found to be associated with learning outcomes in higher-order learning. This research supports teaching and social presence as leading to cognitive presence inherent in student or client experiential change. This research may be utilized in future DE models to aid in higher education students' degree continuance, as well as likeliness as future institutional benefactors.

DE Alliance Relationships Model Rapport and Bonding Relationships

As related to COI, SCT, and WA relationships, alliance theory's bonding is exemplified in effective DE modalities as linked to students' intention to persist. This study researched a similar link with successful DE outcomes with psychology/counseling graduate students'

intention to persist. The students surveyed are associated with behavioral relationship bonding influences as evidenced in COI, SCT, and WA, and traditional education, online, and blended modalities of DE.

Social Cognitive Theory and Community of Inquiry

COI framework is researched to support three defining elements of successful higher education learning outcome. As suggested by Garrison et al. (2000) in their study for deep and meaningful learning, online learning environments are found effective with COI elements of teaching presence, social presence, and cognitive presence in this hierarchy. Of the data collection tools, it is possible to state that the most frequently used and the one adopted the most commonly in the literature is the COI survey instrument developed by Arbaugh et al. (2008).

SCT is an effective factor reflected in COI history that supports traditional education; relationships are established as graduate psychology/counseling students' professor demonstrated in Kortemeier's (2016) study. The professor modeled socialization presence, based on SCT, in learning the counseling profession with these graduate students. COI supported research is prioritized as teaching presence and social presence followed by cognitive presence.

As depicted in Figure 2, COI's teaching presence strongly associated with the intention to persist in DE. As a socialization strategy, the professor in Kortemeier's (2016) study demonstrated common counseling techniques in the classroom. By reflecting effective counseling techniques, students gained insight into effective bonding counseling practices.

Wright-Harp and Cole (2008) found that "mentoring" is needed for enhanced success with facilitating student degree completion, and also with enhancing recruitment and retention efforts. Rapport in relationships is established as the professor/counselor shares knowledge,

skills, and perspectives to foster student/client professional and personal growth and is defined as the term mentoring. Mentoring is found to be an essential component to the survival of effective graduate education.

Community of Inquiry Online Population

Peer and professor rapport are important factors in this study (Figure 2). COI online population research shows how social presence is established via online discussion in Master of Social Work degrees (Ferrera et al., 2013). Utilizing teaching and peers' social presence leads to successful cognitive learning by integrating critical reflection and discussion, as modeled in these two clinical Master of Social Work programs.

Students bond as they collaborate in their online discussions and hear each other's views, reactions, and interactions; therein social presence is established. Opportunities increase as students and professor contribute insight and build critical thinking contributing to their cognitive growth. Teaching presence allows leadership by challenging and adjusting students' cognitive input.

Community of Inquiry Blended and Online Learning Population

Olpak et al. (2016) reviewed and supported DE online programs, noting the three COI elements and evidenced COI indicators. Specifically, the study by Carlon et al. (2012) was to confirm the structure of the COI model within the healthcare discipline. To that end, students receiving 38 different online courses from graduate and undergraduate programs successfully included the COI validation learning elements.

The coding elements of COI found to support teaching presence are (a) instructional management as indicated by defining and initiating discussion topics, (b) building understanding as indicated by sharing personal meaning, and (c) direct instruction as indicated by focusing discussion. The coding elements of COI found to support social presence are (a) emotional expression as indicated by risk-free expression and (b) group cohesion as indicated by encouraging collaboration. The coding elements of COI found to support cognitive presence are (a) exploration as indicated by sense of puzzlement and information exchange, (b) integration as indicated by connecting ideas, and (c) resolution as indicated by applying new ideas.

COI student satisfaction with graduate supervision in doctoral programs primarily delivered in DE settings is researched by Erichsen et al. (2014). COI blended and online satisfaction among graduate DE students in the blended programs was found to be higher than the online modalities who were moderately satisfied. Further research by Akyol et al. (2009) confirmed student satisfaction in blended programs over online programs, noting COI elements. The results showed successful development of teaching, social, and cognitive presence in both programs; higher blended program awareness of COI presences; and significant differences on social and cognitive presence between blended and online formats.

In terms of social presence, affective communication ($p = .001$) and group cohesion ($p = .001$) were found a significant difference between the two programs independently from the other elements. The blended program's higher level of affective communication as evidenced, such as expression of emotions, use of humor, and self-disclosure may be due to the need to establish climate in online program. Additionally, the face-to-face component of blended courses may have increased the group cohesion more effectively and decreased the need for affective communication as compared to the online component.

Social Cognitive Theory

SCT, previously introduced in Chapter One, has history established in traditional SCT that establishes social presence (Erlich & Russ-Eft, 2011) as seen in Poon's (2013) and Arbaugh's (2007) research. SCT history prioritizes teaching and social presence necessary for COI cognitive presence learning to occur. Therefore, this study expands and examines SCT as it relates to graduate students' intention to persist. As an individual's self-efficacy increases regarding his or her academic performance, their levels of persistence and motivation will also increase, resulting in even greater self-efficacy for completing a specific activity, as theorized by Bandura (1997). There were no differences in learned self-efficacy skills detected between traditional, i.e., on-campus, and DE students. Thus, demonstrating that the platform of the educational program did not influence outcomes in reported counseling skills in this sample of rehabilitation counseling students (Meyer, 2014)

This study's survey supports this hypothesis, showing DE psychology/counseling graduate students' intent to persist in degree completion. Hereby, this social element is evidenced to influence graduate programs' effectiveness for bonding and rapport among students and professors.

Graduate school students meet ongoing challenges and manage to cope via rapport and bonding relationships (Schlemper, 2011). Students benefit from building support networks with their professors, student advisors, other faculty members, and peers. These relationships help students balance the demands on their time as well as the academic side of graduate school. They also discover that active involvement in their departments contributes to a sense of belonging and becoming a professional.

Schlemper's (2011) research finds that of the many factors examined, the most significant coping strategies for graduate students are professor and peer relationships, and peer to peer relationships. The students interviewed stated that regarding community building, being involved with peers, such as hanging out to work on schoolwork and periodically asking each other, "How are you doing on that class project?" was the most supportive factor. These relationships are the most community-building departmental factors for this Master of Social Work program.

Social Cognitive Online Presence

Wei et al. (2012) noted that online DE can enhance learning due to social cognitive online presence. Online environments typically benefit students' time management due to the convenience of the format. However, a limitation has been that DE students experience isolation and alienation in this learning modality. SCT evidences a relationship factor enhancing students' bonding and rapport via enhancing social presence.

The results show that social cues have significant effects on social presence. Moreover, this study evidenced that social presence has significant effects on learning interaction, which in turn has significant effects on learning performance. This study presents an online DE framework to facilitate social presence following SCT relevant factors of viable relationships.

Blended Social Cognitive Theory Distance Education: Bonding and Rapport Relationships

Liu, Magjuka, et al. (2007) researched courses in an online MBA program. The findings suggest MBA students felt a sense of belonging to a learning community, learning engagement, and demonstrated positive learning outcomes. However, interviews of both professor and

students reflected mixed views on values and varying opinions on how to build a learning community. One barrier noted is the technology missing a supportive structure to enhance bonding in the online community.

Erichsen et al.'s 2014 research finds that if the goal is to provide doctoral students with skills and knowledge to serve as practitioners then doctoral degrees are best delivered in blended rather than online environments. In the supervisory dissertation process, the participants identified their greatest challenges in completing their doctoral program via distance: work-life-school balance, poor interaction with their chair/advisor, lack of personal (face-to-face) contact, communication difficulties, concerns with time lag and length of time of faculty response, lack of motivation and procrastination, and a deficit in peer-to-peer interaction.

Rapport in Distance Education

Murphy and Rodríguez-Manzanares's (2012) findings reveal that rapport is necessary in DE because of the absence of face-to-face communication. Further, they link their previous research (2008) to find new ways of interacting and building rapport. Virtual and traditional classrooms are contrasted, arguing that in the virtual classroom lacking body language and visual presence, rapport building must be premeditated, consciously promoted, and can only be achieved with a concentrated effort.

Granitz et al.'s (2009) research further confirmed that rapport is necessary in online DE because of the absence of face-to-face communication. They found six categories of rapport-building in online DE as follows: recognizing the person/individual; supporting and monitoring; availability, accessibility, and responsiveness; non text-based interactions; tone of interactions;

non-academic conversation/interactions. These rapport indicators might be used to measure rapport in the transcripts of online discussions or email correspondence.

Of the six rapport-building elements identified in research, all six involve relationship context communications, thus supporting this study's hypothesis of a working relationship bond within students and professor COI, SCT, and WA in DE leading to graduation, i.e., intention to persist. Again, this relationship WA hypothesis is supported, as is seen in this study's surveyed link with intention to persist DE outcomes with psychology/counseling graduate students. Thus supporting that face-to face component of bonding communication can still be accounted for as a DE necessary component with these rapport building elements for online classes.

Working Alliance

History supports that traditional modalities of WA are most effective with graduate students' intention to persist. Drawing from the WA literature the AWAI (Schlosser & Gelso, 2001), was constructed to measure the graduate advising relationship as effective from the student's rapport view.

Consistent with graduate advising relationship factors of WA, psychotherapy researchers Shafran et al. (2017) further support WAI in therapist immediacy. Consistent in educational alliance, the benefits of using immediacy within the WA relationship have been supported by this empirical research, and findings indicate that problems will be resolved, relationships will be enhanced, and clients will transfer their learning to other relationships outside of therapy (Hill & Knox, 2009; Hill et al., 2014).

Working Alliance, Bonding, and Immediacy Collaboration Applied

This study identifies educational intent to persist factors as consistent with previous counseling research findings that it is the relationship/collaboration of bonding that accomplishes the therapists and psychotherapy clients' intention to persist in counseling sessions. The psychoanalytic bond experience is a generalizable concept to the WA of psychology/counseling graduate students' intention to persist and their future careers (Bordin, 1979; Taber et al., 2011).

WA refers to the professional collaborative relationship between leadership and learner (Bordin, 1979). Bonding collaboration WAI is applied via (a) personality congruence associated with the bond, (b) bond associated with task and goal, and (c) task and goal associated with the outcome (Taber et al., 2011). To have stronger WA research, Shafran et al. (2017) found a greater immediacy is indicated.

Immediacy is indicated as being instrumental in building the WA and repairing alliance ruptures when they occur. Therefore, greater immediacy is theoretically related to a stronger WA. Research finds a positive time growth pattern built upon established relationship safety. Studies examining patterns of WA development show that a dynamic construct showing a positive linear growth pattern of greater immediacy is associated with stronger WA (Shafran et al., 2017).

Working Alliance in Distance Education

Consistent with two modes of DE alliance, researchers Cook and Doyle (2002) found WAI scale establishes WA both in face-to-face and online therapy populations. As related to this graduate psychology/counseling education DE population study, effective online learning is established through WA graduate peer relations. Cognitive psychology learning occurs through individuals' cognitive processes (Beomkyu, 2016), whereas Bandura (1997) and Zimmerman (1989) view learning as a social, environmental, and behavioral exchange process (Beomkyu,

2016). Three self-regulatory processes playing a central role for the construct of academic self-efficacy beliefs: self-observation, self-judgment, and self-reactions.

The findings of a multiple regression analysis showed that metacognitive strategy and peer learning led to learners' satisfaction in an online learning environment. Metacognitive strategy refers to the awareness, knowledge, and control of cognition (Beomkyu, 2016). Time and study environment strategy refers to the degree to which students manage their time and set up a study environment conducive to learning. The more that students focused on metacognitive and peer learning environments, the greater their online learning environment satisfaction. Thereby, the professor's online guidance, learning content, and tasks in this environment should be presented in such ways that learners can plan, monitor, and regulate such activities (i.e., metacognitively), and should be organized to promote peer interaction among the learners. SCT exhibits learning strategies that are not just cognitive phenomenon; rather they are manifested overtly, socially, and behaviorally in Beomkyu's 2016 review of graduate WA online learning environment.

Importance of Working Alliance Blended Distance Education Rapport and Bonding Research Relationships in DE

Cain et al.'s (2003) research needs of graduate students and find that support services matter. This review examines the use and effectiveness of peer interaction for educational and social support. Professor support must necessarily be timely and communication effective in DE, as students sought the professor for both academic and non-academic information.

This support system evidenced within blended learning establishes student satisfaction as a community experience, as researched by Sorden and Munene (2013). Their research addresses

constructs of social presence, collaborative learning, computer-supported collaborative learning, and satisfaction in community college blended learning environments. Social presence, defined by Garrison (2009), helps learners to project themselves online and feel a sense of community. Garrison further suggested that "Social presence occurs when learners are able to identify with a community, communicate within that community, and develop relationships by projecting their personalities" (2009, p. 352). The findings link a strong correlation between social presence and student satisfaction.

The study sample was reflective of the general college population (Sorden & Munene, 2013). Of the top ten student satisfaction and social presence elements measured, "My instructor met my learning expectations" was ranked highest, and "I would take another blended course again" was ranked in the top half of satisfaction elements. Similarly reflected in an intensive mode of blended learning, was that students prefer collaborating in face-to-face environments rather than online. The study found a positive relationship between satisfaction and social presence and collaborative learning. As collaboration rose thus did perceived social presence.

Supporting this study's hypothesis of face-to face opportunity and professor and peer rapport factors, it is interesting in this blended learning computer-based element that students did not see online communication as being useful for building relationships. However, they did see it as a social experience. Two of the lowest ranked items on relationship social presence dealt with whether computer-mediated communication helped to build trust and caring relationships, thus supporting blended learning as superior to online DE.

Validation is linked to students' intention to persist in DE as supported by this research. Richardson and Swan (2003) studied learners' perceived social presence and its relationship to perceived learning and satisfaction with professors. They found that all the variables correlated

and that social presence was a good predictor of student satisfaction. Correlating with this study's DE psychology/counseling students' intention to persist, additional to the importance from the learner's perspective, student satisfaction is important to the institution because it has been shown to be an important factor in student retention (Liu, Gomez, et al., 2007; Liu et al., 2009).

A limitation to this study is that it may not be a representative sample for our research as it samples the population of undergraduate, non-university students in this community college blended learning population. Again, the research consists of mostly by undergraduate blended education programs. The research of Sorden and Munene (2013) correlate the two constructs of social presence and perceived collaboration, and student satisfaction and the relationship between student satisfaction in online learning and blended-learning environments. The following research supports social presence leading to student satisfaction in both blended and online learning environments: Conrad & Donaldson, 2004; Ferguson & DeFelice, 2010; Garrison & Vaughan, 2007; Jung et al., 2002; Jusoff & Khodabandelou, 2009; Kang & Kang, 2008; Nummenmaa & Nummenmaa, 2008; Palloff & Pratt, 2007; Richardson & Swan, 2003; So & Brush, 2008; Tu & McIsaac, 2002.

Ferguson and DeFelice (2010) compared graduate students' online intensive model of DE to a full semester of the same online course with same professor. This time variable moderation study examined three dependent variables: being satisfied with the course, perceived learning, and academic performance. Results on student satisfaction with the intensive versus the full semester format involve satisfaction variations on communications. Due to the intensive short-term timing, of five-week online course, students were less satisfied with their professor's communications, and more satisfied with peer relations than the full-term students were. Perhaps

the graduate online students relied on each other to a greater degree in the intensive course, using the discussion board and/or email. In conclusion, findings establish that reinforcement and providing feedback are important to motivation and thus to satisfaction. The five-week online course in which students were less satisfied with communications with the professor fits, in that less feedback and reinforcement were being provided by the professor in the shortened course.

University students' emotions, interests, and activities are considered in an online learning environment. Nummenmaa and Nummenmaa's (2008) research revealed that during the courses, a positive association with students with high interest in the online learning during and after the courses experienced more positive emotions than participants with low interest.

The results also demonstrated that students not actively participating in the collaborative learning, i.e. lurkers, had more negative emotional experiences during the courses than other students. The results highlight the distinct impacts that emotions and interest have on different online learning engagements and should be considered when designing web-based courses.

So and Brush (2008) examined levels of collaborative learning, social presence, and overall satisfaction in a blended learning environment. The population appropriate to this graduate study consisted of 48 graduate students who took a blended course in health education and worked on a collaborative group project. Findings evidence high levels of collaborative learning. Additionally, high levels of social presence were positively correlated with student satisfaction, although not statically significant.

Liu, Gomez, et al. (2007) and Horton (2011) suggested that students can be motivated to collaborate and stay engaged in a course to build a learning community. Techniques such as setting clear expectations, commitment, making online courses fun and interesting, providing support via encouraging feedback, and intervening early with lackadaisical students enhance a

learning community. Blended, intensive DE modalities can provide a more extensive peer and professor rapport-building opportunity.

An intensive modality of DE, for instance, models COI/SCT (social presence enabling cognitive presence) by providing opportunities for students' social bonding, such as evening dining out with students and professor. Kehrwald (2007) asserted that in order to build these connections of collaboration and social presence, an online professor must build a strong presence in the course; the presence-building tasks should be included in introductory course activities, and activities for interpersonal rapport building and bonding should be required rather than suggested.

In summary, this research reviews a history of blended learning and online approaches to DE, ultimately suggesting that blended learning is a viable alternative approach to face-to-face or online environments. An extension of this research links to this study's hypothesis regarding the population of DE graduate psychology/counseling students' intention to persist.

Teaching Alliance and Social Presence Online and Blended Distance Education

This research is consistent with educational rapport (WA) as therapist rapport with therapeutic/teaching alliance to clients (Luczaj, 2010; Muran & Barber, 2010), this study evidences that professor rapport with students enhances teaching alliance in psychology/counseling DE students' intention to persist. This research gap is established in this study as survey results show professor rapport and teaching alliance as one of five factors leading to DE graduate psychology/counseling students' intention to persist.

Zilka et al. (2018) consider the effects of teacher presence and social presence (SP) of professors in virtual online and blended DE. Findings show that physical separation between

professors and DE students may lead to transactional distance, which should be reduced to develop an effective learning community. The professors' style of writing encourages or discourages interaction between students and the development of a learning community in the course.

Findings recommend that professors design virtual courses for less emotional threat via interaction with DE students. Emotional threat was observed as less of a concern in the blended course. Allowing for group interaction and shared learning, the professors can encourage each student's voice as a contribution important for the entire group. As hypothesized, this study further establishes a need for teacher presence and social presence of professor and student rapport to be evidenced in the teaching alliance capacity.

Teacher presence allows the creation of a learning environment that supports the students and is attentive to their needs (social presence) while enhancing the learning quality, which was more satisfying for students in the blended format. Students in the virtual course experienced reduced transactional distance and increased students' sense of belonging, as opposed to feelings of alienation and isolation. Conversely, teachers who did not encourage the creation of a learning community, maintained distance, and reduced feedback increased the students' feeling of transactional distance. It was found that teachers who encouraged the creation of a learning community increased their teacher and social presence, which led to reduced transactional distance.

Unique Distance Education Support Factors: Rapport Linked to Bonding Relationships Intent to Persist

The power of environment influences life and death choices dependent upon isolation versus socialization of community relationships of support. This study reviews students' life

choices influenced by the educational environment of rapport and bonding, leading toward degree persistence rather than death choices of discontinuation of degree completion. This study considers the relationship influence of bonding.

This DE study reflects relationship influence of bonding alliance power in graduate students' intent to persist to degree completion. Additional research is consistent with the powerful bonding relationship affecting intention to persist, as researcher DeGrandpre (2006) showed that it is the relationship's psychological hook. Positively speaking, as related to this study, it would follow that the COI environment has powerful attributes for one's intention to persist.

As consistent with bonding's relationship effect with students' intention to persist in DE degree completion, the power of the bonding relationship factor's strength is observed. Consistent with this study, bonding relationships research via Bruce Alexander finds the bonding relationship means a dopamine bonding experience (cited by, Hercz, 2007). Bonding relationships strengths of pull can be found in gambling, work, shopping, food, the Internet, and anorexia. Research shows that as far as the brain is concerned, these activities are also drugs, raising levels of the neurotransmitter dopamine, just like alcohol and heroin. Dopamine bonding addictions, research notes rats will choose, as an attuned alliance, a sugar treat over heroin (Huynh et al., 2017). Similar to the dopamine attuned alliance bonding relationship strength consistent with this study, the positive pull examined in the five factors hypothesis, this DE bonding relationship environment finds as a significant factor in students' degree persistence.

Relating behavior management's bonding power of persistence relationship research, even more natural animals' instinctual behaviors, is consistent with this study in that it addresses those supportive relationship factors. Just as medical science uses animals to develop and test

theories for human medicine, behavioral scientists' also use animal studies to consider and possibly remedy human relationships. The social relationship environment is consistent with this study's relationship strength as seen in both human psychology and the animal species. For example, the Rat Park environment experiment found that rats in social environments were bonding to the outcome of positive relationships. While the rats in isolation were likely to participate in addictive patterns (Alexander et al., 1978, 1981).

As an example in a clinical setting, Lambert and Barley (2001) found that factors of social support account for 40% of client change, expectancy accounts for 15% of change, therapy techniques accounts for another 15% of change, and TA accounts for 30%, which leads to therapeutic client change. these factors account for 70% of client therapeutic change, (i.e., social support and TA). Thereby, as related to this study's SCT theoretical framework, it is notable that social relationship environment is similarly evidenced as influencing persistence in two directions, negatively when absent and positively when social bonding is present. This study focuses on those supportive relationship factors (i.e., COI environment and support) from professor and colleague rapport and like-minded face-to-face rapport, significantly affecting students' pursuit toward obtaining their educational goals.

TA bonding is effective within the counselor to the counselee relationship (Lambert & Barley, 2001) and this study similar purports that these factors that are found both animal studies and studies on counseling effectiveness will be similarly demonstrated in DE environments. This study modifies the COI scale to measure teaching presence, social presence, and cognitive presence in a more effective way. Current COI measures course specific (i.e., program specific) factors, which the professor has no control over since it is administratively designed. This study

proposes modified COI relationship factors to examine teaching presence measuring the quality of communication with students, as well as the communication between students.

However, should the established COI not be found to be effective to support relationship as an enhancing factor for graduate psychology/counseling students' intention to persist in their counseling education, then the researchers suggest a future study with revised COI format allowing teaching presence to be structured more effectively. As established research has been presented here, teaching presence dominance, followed by social and cognitive presence in COI learning accounts for the most COI variability, in educational development.

Student bonding and teaching presence, as seen in COI relationships, account for social presence building trust as a common factor within the element of learning. This teaching presence is like the counselor-counselee relationship, which provides the context for the counseling technique's influence. Golden (2004) reviews the APA's findings and continues to note that counseling techniques and interventions applied are relational acts. This relational context acts as a partnership of building trust within the counseling method and is effective to intent to persist in the counseling relationship. Just as proposed to be seen as effective partnership relationship building in DE in pursuit of educational goals as related to teaching presence, allowing the teaching method, teaching presence, and social presence as relational acts in the intensive model of DE.

Furthermore, APA reviews (Golden, 2004) found that client-perceived relationship factors are closely related to positive results. Clients attribute positive treatment outcome to therapist's personal attributes of therapist warmth, attentiveness, interest, respectfulness, and understanding. These findings, as previously reviewed, are also seen as effective teaching presence (Baker, 2003). Personal attributes surveyed in this study are hypothesized to be linked

to graduate psychology/counseling students' DE degree continuance and future institutional benefactors.

APA also reviews Tatkins' research to support WA relationships of growth as an educational and therapeutic factor (Tatkin, 2004, 2005, 2009). These relationships of growth are reviewed in counselor education studies of helping relationships. Tatkin's findings illustrate that we are hurt by people and we are helped by people. This is the relationships of growth factor in counselor educational studies: helping relationships both in DE pursuit and also in helping clients in therapy.

Tatkin's research found that the bonding relationship factor supports human growth. This study further attempts to replicate the efficacy of the COI bonding relationships, hypothesizing it is also supported in human growth learning environments within the professor to student and peer bonding relationships. Aided by professional counseling supervision, Tatkin's (2009) research shows that professionally trained counselors who have developed stable relationships of growth between professor and students can model protected focus against their clients' negative presentation. His research deduces that the relationship is the client's medicine (Tatkin, 2009).

TA bonding time is a relationship factor researched by Crewther et al. (2009). One application from Crewther's research team illustrates this bonding theory and shows that socializing reduces stress via shutting down harmful stress and immune responses. This study proposes to relate the relationship factor research consistent with psychology/counseling students' COI DE environments. As students engage in relationships of growth via bonding time, research shows their DE stress is reduced (Crewther et al., 2009). Bonding experiences enhance health outcomes via socialization that leads to the release of hormones, such as oxytocin and

testosterone. These hormones are researched to benefit mood and boost energy while reducing study stress.

Additionally, research establishes the bonding effect of relationships, i.e., a ubiquitous term consistent with students in this study, that enhance counseling effectiveness and learning outcomes (Zuckoff, 2017). Zuckoff and colleagues (2006) established that a relationship of acceptance creates psychological safety. This atmosphere of safety reduces clients' anxiety, avoidance, and self-blame resulting in an increase of clients' improved self-control and growth change outcomes. Thereby, the ubiquity of relationships as this study purports, the COI relationship effectively creates a learning environment for acceptance both in educational and therapeutic growth experiences. This study is proposed to significantly affect psychology/counseling students' intention to persist in their DE based on the COI relationship variable, as evidenced by the learning environment bonding factors of professor rapport, peer rapport, and face-to-face opportunity.

In reviewing this study's DE interaction alliance factors, previous COI research is extended and reflected with graduate medical students considering what is effective in continuing medical education. A study conducted by the American Medical Association consisted of similar alliance factors in this study of the face-to-face component along with the live, interactive web talk between instructor (i.e., professor) and physicians (i.e., graduate psychology/counseling students) who participated Internet-based continuing medical education (Fordis et al., 2005). Their continuing medical education Internet-based results evidenced both behavioral and knowledge gains. These gains were sustained over 12 weeks, comparable or superior to gains via live interactive continuing medical education (CME) workshops.

These results, as related to the psychology/counseling graduate DE students, are generalizable to other medical populations. The randomization process controlled for self-selection bias typical of those familiar with Internet use. Significant findings identified in this randomized controlled trial were still observed within the less comfortable Internet-based intervention group than those randomized to the familiar live CME intervention.

As relates to this study, COI relationships aid emotional regulation via social support. Researchers Crewther et al. (2009) and Tatkin (2009) indicate the importance of COI relationships and social support at the time of stressful experiences. Tatkin's (2004, 2005, 2009) research examined WA relations to aid memory. Thereby, COI relationships are found to aid students who are overwhelmed with life stressors and may be found to be comforted via peer and professor bonding and rapport, or social attachment relationships.

As previously reviewed and applying effective counseling change factors, research found a significant relationship between social support and TA (Lambert & Barley, 2001). Hereby, this research is hypothesized to be extended to WA factors affecting DE graduate psychology/counseling students' alliances leading to their intent to persist. Corbin's (2011) research found teaching presence within the teaching alliance factor to develop students' counseling skills. WA between students increased positive outcomes.

These WA factors predicted more positive outcomes than techniques utilized. These researchers of WA, Haan et al. (2011), show that helpfulness is predicted by the relationship, empathic understanding, and positive expectations. Helpfulness, as established within WA, relates to relationships' secure attachment referred to in this study's relationships of bonding and rapport. Tatkin's (2009) research further establishes relationships of bonding and rapport, as

proposed to be established, professionally between professor and student, and between students and their peers.

Tatkin's (2004) research shows that in trauma relationships of bonding and rapport, i.e., attachment, the brain's prefrontal cortex and amygdala become overused and hyper-aroused for survival. Although students may not have been in such extreme situations, it is still an example of how the brain grows and can be healed through relationships. This relationship of bonding and rapport is hypothesized as a significant factor influencing DE psychology/counseling students to help each other grow via intent to persist.

In summary, relationships can harm or help. The DE psychology/counseling bonding and rapport relationships harmonize with the medical profession's motto and their duty to "do no harm." As proposed in this research study, DE psychology/counseling graduate students' bonding and rapport relationships enable them to "do no harm" as they pursue their helping professions, enabling and empowering their intention to persist to degree completion.

In this study, DE graduate psychology/counseling students are surveyed to find if supportive professor and student relationships exemplify relationships of growth leading to their DE intention to persist and as reflected in their likeliness to be future institutional benefactors. In relationships of growth, bonding and rapport COI alliance factors are examined: offering social support is evidenced to treat stressors (Tatkin, 2009). Thereby, this research is reflected in the adage "feel it to heal it" as a possible expanded association between DE students' experienced stressors that are healed with relationships of growth. Such relationships are ensued via social support of peers and teaching presence WA in bonding and rapport COI framework.

As related to the purpose of this study, just as early TA predicts therapy outcome (Barber, et al., 2000) this study's research question asks: Does teaching presence build WA and predict

DE graduate psychology/counseling students' model of learning choice (i.e., online, blended, and traditional educational formats) as related to DE students' educational intention to persist? In this following empirically supported research article, the importance of patients' self-presentational behaviors affecting TA is examined.

"Timing is everything" is a well-known adage. Early TA is an important predictor for therapy outcome, according to researchers Frühauf et al. (2015). Their findings are important to building TA as well as identifying patients' needs. Using the Bern Post-Session Report, they found that the therapeutic factors of Agenda Setting and Self-Promotion related positively to TA from the therapists' view. However, to the patients, only self-promotion, not agenda setting, was positively related to TA outcomes. Future research is warranted to examine if WA is also linked to relevant timing with professor rapport agenda setting being secondary to a primary focus on promoting students' rapport relationships to influence intention to persist.

Organization of the Remaining Chapters

Chapter Three: Methods will describe the research method as quasi-experimental and correlational research. This includes the proposed method of surveyed data collection, measures utilized, data analysis procedures, and ethical considerations of the study. Procedures are reviewed to obtain this study's survey data. Chapter Four: Data Analysis and Results are presented. Lastly, in Chapter Five: Discussion, Conclusions, and Recommendations, the study's results will be explored, including an explanation of how each of the hypotheses was tested using statistical analysis and how the data that was obtained. Any supplemental analyses will be described in this section. Chapter Five will present a summary of the results, an interpretation of

these results, how these findings relate to previous research, and the implications of the findings.

Limitations of this research and areas for future research will also be discussed.

Extended Applications of the Rapport and Bonding Principle

This chapter incorporates both social and biblical relevance of this study's rapport and

bonding principles' COI/SCT/WA environment factors. This chapter extends this rapport and

bonding hypothesis as potentially relevant to other populations to aid in goal obtainment as

related to this study's DV. Relationship alliance factors further identify the benefits that promote

healthy growth rapport in students. Chapter Two includes an in-depth exploration of the topics of

bonding and rapport relationships (i.e., attachment) and growth as seen in the learning

environment of counseling and COI educational research literature. The power of bonding as

seen in WA in relationships is surveyed to be evidenced in professor to student and student to

student TA relationships environment.

Social Relevance

The ubiquity of relationships is seen in educational and social growth contexts within

various populations' bonding environments. The importance of bonding environments is

evidenced as a needed element for graduate students' intention to persist. Current DE graduate

students' degree completion rates are lessening due to the extended length of degree completion

time (Ferrer de Valero, 2001). This premise establishes a need for this study identifying the

graduate psychology/counseling students' degree completion intention to persist. This DE

modality, as surveyed, produces increased educational success that is related to increased

educational intention to persist. Identifying the factors that link therapy rapport and bonding

relationships to educational rapport and bonding relationships, another socially relevant population is considered.

The factors of returning to a safe environment of community support and bonding, extending to the Vietnam veterans' population intent to persist in drug-free living, the power of relationship bonding is evidenced (Maté, 2009; Robins, 1973; Robins et al., 1974). Bonding decreases drug use recidivism. This finding supports the power of bonding, showing that 95% of Vietnam war veterans, upon returning home, ceased drug use without drug rehab due to community support factors. The very small percent who continued to use were found to have had unstable childhoods or had been prior addicts (Maté, 2009).

Further bonding factors are evidenced to influence healthy living choices. Hall and Weier (2017) reviewed a study of Robins which replicates war veterans' heroin use cessation recidivism rates. Robins's studies found high rates of heroin use (34%) and dependence (20%) among U.S. soldiers while serving in Vietnam. However, upon discharge home to the United States, only 1% became re-addicted to heroin, while 10% initially drug experimented (Robins, 1973; Robins et al., 1974)

Upon review of the abstinent veterans, Robins found the strong disapproval of friends and family was stated as one of the withholding influences. The role of strong social disapproval in discouraging heroin use, along with its high price and low availability, is suggested by the veterans to have influenced making fewer addictive choices. Cannabis was highly used among veterans after returning home, as it was widely available and not as socially disapproved of as heroin, thus evidencing the power of social approval factors, similar to peer rapport within the community. Furthermore, the study's participants reflected one of the inhibitions of substance use to be the social attitudes towards drug use among peers and the broader community. The role

of social norms is evidenced in bonding via peer rapport, social opportunities in face-to-face gatherings, and the COI within the DE population and its environment.

The final application of bonding is repeated to benefit the isolated drug and alcohol populations verses the bonding community. In the Rat Park experiment (Hercz, 2007), the bonding community is expounded to consider the associated socialization support environment. Healthier life choices are evidenced in the Rat Park community, just as related to healthier life choice of students' intention to persist in DE learning environments section to follow.

Social relevance of bonding relationships linking psychology/counseling persistence between therapist and client establishes the need for quality education of counselors to evidence growth alliance factors. Considering the reality of DE counseling online modality, this study shows its effectiveness to establish educational relationships (Beomkyu, 2016; Benshoff & Gibbons, 2011).

Biblical Relevance

The ministry of relationships as a socializing alliance factor influencing bonding relationships is evidenced within the psychology/counseling graduate institutions' opportunities to meet to worship during their school week through chapel attendance. The biblical model of Jesus in DE is reflected throughout this study as seen in Jesus's modality of discipleship via friendship relationships. His disciples were essentially doing intensives as Jesus walked with them to teach them via events outside of the classroom and in lifestyle. As previously referenced in this study's COI research, cognitive learning comes after teaching and social learning, similar to the DE intensive out to eat socialization allowing for cognitive learning to be solidified from the days' face-to-face learning.

This study links its premise of the five factors of relationship bonding leading to DE students' intent to persist to Jesus lifestyle ministry. Jesus examples all five factors of relationship ministry, resulting in the disciples following through in their intent to persist with lifelong devotion. This lifelong devotion may also be seen as identifying students as benefactors to their institution of DE learning. Jesus offered His teaching via five COI elements: Face to face opportunity; Teaching alliance; Disciples' peer rapport; and Jesus as Professor rapport.

The biblical relevance of this study is reflected in the teaching format of Jesus' ministry with His followers. Jesus' followers teaching alliance also demonstrated lifelong learning and persistence, similar to the university DE students' intention to persist. Jesus DE is evidenced in His Holy Spirit as the great counselor and as the author of wisdom. Of course, the conclusion being that the greatest Jesus DE one can ascertain, is to receive the degree of heavenly enrollment.

Further identifying the Biblical relevance of students' persistence, Victor Frankl, a survivor of WWII concentration camps, also demonstrated students' intent to persist. Frankl lived his life following Nietzsche who said, "to those who have a 'Why' to live for can bear almost any 'How'" (as cited in Hemming, 2008). As related to graduate psychology/counseling students' retention and persistence, their "why" is answered in relationships of bonding and desire of degree completion. Frankl's logotherapy conveys life's purposes in his 1963 text *Man's Search for Meaning*. Jackson and Coursey (1988) further referenced Frankl's internal locus of control and link it to God control, religious motivation, coping, and life's purpose.

God control is refuted by a secular perspective to be associated with a lack of personal or internal control (Jackson & Coursey, 1988). This view is equated with a passive view of humanity's ability to be effective personally or to have influence upon world conditions, also

referred to as having an external locus of control. Internal locus of control, but not God control, predicted coping skills and life purpose. Jackson and Coursey's (1988) findings show both factors of God control and internal locus of control predict religious intrinsic motivation.

This religious institution DE study relates findings to students' God control and internal locus of control intrinsic to both religious motivation and purpose of life and ties in with education motivation associated with intention to persist. Present findings show measures of coping and life purpose are solely associated with participants' internal locus of control and is not linked to a God control factor. A future study is suggested, associating religious affiliation with higher education choice as students' motivational factor of God control being associated with their intention to persist.

Chapter Two Summary

Chapter Two is an in-depth exploration on the topics of bonding and rapport relationships (i.e., attachment) and growth as seen in the learning environment of counseling and COI educational research literature. The purpose incorporates both biblical and social relevance of this study's bonding principle while extending the power of bonding to aid other relevant populations as related to this study's DV goal obtainment. This chapter also identifies factors and benefits that promote healthy growth relationships in education and counseling clients. The independent variables of face-to-face opportunity, peer rapport, and professor rapport are explored and discussed to determine the weight of COI relationships as a significant factor present in DE models, as affecting their intention to persist in DE.

As described by Benshoff and Gibbons (2011), this type of DE is an asynchronous approach to online graduate teaching in psychology/counselor education. These researchers

review incorporating asynchronous (e.g., Blackboard) and synchronous (e.g., online discussion) teaching approaches to learning. Many psychology/counselor educators use online teaching platforms such as Blackboard as a way of incorporating asynchronous communication to enhance face-to-face courses. As related to the purpose of this study, their research further establishes that social contact alliances and interaction are necessary elements for effective DE in psychology/counselor education.

Psychotherapy research has shown that the quality of the alliance is the most robust predictor of treatment success (Muran & Barber, 2010). TA is considered important for successful counseling experiences, as reviewed by Mahaffey and Granello (2007). This literature review examines 19 marital and family therapy studies; finding TA is supported as a crucial factor within marital and family counseling, theory, and assessment. Alliances between a therapist and couples or family members become complicated because of multiple interactions. Future research is needed to examine diverse populations and to show how therapist experience and therapeutic setting affect TA.

Finally, WA is examined in Corbin's study (2011). Improving the ability to understand one another and communicate more optimally and effectively would seem highly relevant, notes Corbin, especially in relation to the art of counseling. As per Carey et al. (1988), communication is an important component in developing a better supervisory relationship and promoting greater learning for counselor trainees. Similarly, examining other types of domains (e.g., counselor education) where developing a WA between the "customer" and provider is a logical extension of these findings. Investigating and discovering new ways of improving and enhancing counselor education and supervision is a salient factor for future research in the continuing development of the profession of counseling.

Corbin's (2011) research attempts to identify one component which may help to influence or contribute to more effective training to enhance the supervisory WA in counseling supervision and, subsequently, basic counseling skill competency. It is designed to examine the differential effects of supervisor/counselor trainees' personality type congruence/non-congruence based on matching/non-matching supervisor/counselor trainee introvert or extrovert personality characteristics. Therefore, a study examining the effects of individual personality characteristics of the supervisor and counselor trainee, supervisory WA relationship, and basic counseling skill development appears justified. Herein, this study purposes to examine WA by considering effective teaching presence descriptors as they may influence psychology/counseling students' counseling skill development.

The importance of a strong supervisory WA has been reported to not only impact the supervisory process but also impact the counselor trainee's relationship with their clients (Webb & Wheeler, 1998). Corbin's study (2011) reveals that many researchers agree that the relationship between a counselor trainee and supervisor is an important factor in helping to shape the counselor trainee into a professional (as cited in Holloway, 1995). Through this study, continued focus on identification of potentially influential factors within the teacher to student relationship, and the student bonding relationship may serve to enhance the DE WA for psychology/counselor trainees, and ultimately enhance their training and development as competent professionals.

This literature review establishes that a need exists within research to expand the continuing investigation among the established COI in successful formats of counselor education, (i.e., online, blended, and traditional educational formats) in successful educational outcomes and the development of a positive learning environment. Specifically, this study

researches how learned and education modality of graduate psychology/counseling students' education as correlated within the professor and peer bonding and rapport (i.e., attachment) alliances within counseling outcomes, as seen in the moderating effects of COI relationship in DE. In summary, TA and WA are consistent with relationship factors affecting counseling outcomes and classroom outcomes, as seen in previous research and extended to this research, as seen in the effectiveness of clients' and students' intention to persist.

The synopsis of Chapter Two consists of supporting research linking DE relationship variables of COI relationships, student bonding, professor rapport, and impact of face-to-face bonding influence leading to students' intention to persist in their DE. Further reviewed is social support, a COI factor evidenced as generalizable to extended populations as effective to learning and to persist in growth results. TA and WA research is established as a supportive factor overall, encompassing COI and SCT to aid in developing therapist and client/peer and professor attachment relationships of persistence in psychological bonding and in DE.

Social relevance and biblical relevance of this study's attachment bonding and rapport relationships evidence the life outcome of positive survival strength utilizing COI social support to aid the recovering veterans' population and the religious survival motivation association with God control intrinsic factor, coping, and life purpose to persist. Jesus in DE examples Biblical, historical, and current events of the Holy Spirit's power in Christians to persist on to Heaven's reward.

This study's surveyed outcomes reveal DE persistence factors linking hypothesized retention and persistence independent variables. Findings of survey identify DE relationship development with good educational outcomes. This outcome is further reviewed and supported in the dislocation theory of disconnection leading to harm. Additionally, the bonding

environment is ubiquitous in this relationships' theory, leading to educational learning, social growth probability, and likeliness with graduate DE students. To summarize, this study replicates the supportive attachment bonding and rapport relationships from professors and colleague rapport, with like-minded face-to-face rapport significantly affecting students' intent to persist in obtaining their educational goals.

CHAPTER THREE: METHODS

Chapter Three describes the research methodology involved as quasi-experimental and correlational research and addresses the research questions. This includes the method of survey data collection, measures utilized, and data analysis procedures. Procedures to obtain this study's survey data are reviewed.

The purpose of the present alliance research is to validate the effective factors leading to graduate psychology/counseling DE students' intent to persist, and to better understand the views and needs for effective student-professor alliances at the university level. This relationship research extends the established effective psychology/counseling factors of therapist to client persistence. This present research further establishes and extends COI research linking the four IV factors of alliance relationship: bonding between professor and student, peer rapport, teaching alliance, and face-to-face opportunity leading to students' intent to persist. The face-to-face interaction alliance elements are hypothesized as leading participants' intent to persist in DE psychology/counseling graduate education.

Research Questions and Hypotheses:

There are five DE research hypotheses that are the focus of this investigation:

1. It was hypothesized that the development of a WA among student peers and between students and their professors results in students' educational intent to persist as a sense of community of teaching alliance and face-to-face interactions affect COI student bonding relationships.

2. Specifically, the outcomes include an increase in graduate psychology/counseling students' intention to persist, and a strengthening of the relationship experience between intensive students and their professors as is evidenced in the face-to-face relationship validity intensive model of blended DE.

3. It was hypothesized that as students' social bonding and teacher presence in students' COI (Akyol & Garrison, 2011; Arbaugh, 2007; Baker, 2003; Boston et al., 2010; Swan et al., 2009) within the WA in DE increase, students will become more satisfied with their educational experiences. This research would benefit the DE field, as it seeks to identify the factors that account for the WA between professors and graduate students' relationships, thereby enhancing their intent to persist and educational ability and empowerment.

4. This study hypothesized that it is not the educational modality, i.e., not the type of education (online, intensive, or residential), but the COI relationship components that improve the WA relationship between peers and professors, which then facilitate positive outcomes regarding students' intent to persist and institutional benefactors as DE students.

5. More specifically, DE approaches that promote more COI and the NSSE rapport subscales interaction between students and instructors yield positive WA relationship outcomes, and consequently, propose student persistence and institutional benefactors. The COI relationship components (i.e., IVs on chart) measured were (a) students' and professors' face-to- face opportunity; (b) teaching alliance; (c) peer rapport; and (d) professor rapport, correlated with students' intention to persist

(dependent variable). Graduate students' rapport with peers and professors was assessed by utilizing the NSSE.

Examining the research question, how do NSSE subscales (Shinde, 2010) relate to peer rapport and professor rapport? The index "Faculty Accessibility," i.e., professor rapport, is minimally significant. The indices "Social Engagement," i.e. peer rapport, is found to be a significant predictor of college freshman retention along with "Overall Satisfaction."

Second, how do the elements of COI and the NSSE rapport subscales relate to intention to persist, and a projection to become institutional benefactors? The link between COI elements of teaching, social, cognitive presence and NSSE's 11 indices measuring student engagement found significant predictors among higher education students' retention, i.e., intention to persist to become institutional benefactors, within these subscale indices. Linking COI's Social presence and NSSE, both genders indicate social engagement as a significant predictor of intention to persist.

Does teaching presence influence graduate psychology/counselor students' educational model choice of learning (i.e., online, blended, and traditional educational formats) as related to students' COI and SCT? As previously stated, Poon's (2013) research reviews the shift in the instructional model as moving from lecture-centered to student-centered interactional model within the learning experience. COI is researched as a successful non-traditional educational learning factor with Arbaugh (2007) noting a priority among the COI elements. Arbaugh's study found that social presence ranks over cognitive presence in higher-order learning. With teaching presence already established first in priority (Arbaugh, 2007; Garrison et al., 2000; Pone, 2013) as a binding element of COI, social presence is needed to establish cognit ive presence.

And third, how does DE modality of online, face-to-face, or intensive either attenuate or strengthen those relationships? This study also expanded Poon's and Arbaugh's research by asking this research question. Research evidences the priority of teaching and social presence necessary for COI cognitive presence learning to occur. Therefore, this study hypothesizes that the student-centered COI factors of teaching presence and social presence are established within the blended model of education. It follows that this research question asks: Are students' attending mode of student-centered interactional learning preference versus non-intensive, non-attending online mode of learning evidenced within the intensive, retreat component and convenience of blended DE as improved student educational, social experiences via the learning element of bonding alliance relationships? As discussed in Results, survey findings link intensive mode of learning as a significant relationship bonding alliance factor as leading to students' intention to persist (dependent variable).

A final research question summarizes this study's hypothesis. Is a sense of community relationships felt within the learning environment, and as surveyed, does it affect students' intent to persist? The NSSE research expands students' retention results as greater than students' institutional benefactors. These research questions assess graduate psychology/counseling students' relationship bonding and growth as consistent with their education within their psychology/counseling professions.

Procedures

The data for this study were collected via survey of DE psychology/counseling graduate students' voluntary participation. To obtain participants, an email requesting participation was sent to all students enrolled in graduate programs of psychology/counseling in the School of

Behavioral Sciences at Liberty University. Before any data were collected, the Institutional

Review Board approved the project. The email included a link to a qualitative survey containing

questions about demographics and a variety of measures. Students did not receive any

compensation for completing the survey. All survey responses were downloaded from Qualtrics

and put into SPSS for data screening and analysis. Data screening was performed by eliminating

cases with incomplete responses, inattentive responding, and multivariate outliers.

Participants

The sample size consisted of 500 counseling students enrolled in DE graduate master's

degree intensive and online student programs in counseling/marriage and family therapy or

school counseling. Participants were primarily women ($n = 440$; 88%) with some men ($n = 60$;

12%). The majority identified as White or Caucasian ($n = 355$; 71.0%), with others identifying as

Black or African American ($n = 91$; 18.2%), Hispanic or Latino ($n = 22$; 4.4%), Asian ($n = 6$;

1.2%), American Indian or Alaska Native ($n = 3$; 0.6%), and other ($n = 23$; 4.6%). Over two

thirds of participants were married ($n = 339$; 67.8%), with some identifying as single ($n = 103$;

20.8%) and divorced ($n = 42$; 8.4%). Of the 498 participants that indicated their employment

status 49.4% were employed full-time ($n = 247$), just over 25% were unemployed ($n = 126$), and

25% were employed part-time ($n = 125$).

After data screening, 1,001 participants remained. The six excluded participants were due to two
people (0.2%) non-responsiveness, i.e., incomplete ethnicity and relationship status data.
However, the excluded data could be due to the survey that did not offer a "prefer not to
respond" selection. Four (0.4%) other participant exclusions did not report their employment
status. Again, these four exclusions may have been due to not offering a "prefer not to respond"
choice.

Table 1

Demographics

Demographic	Frequency	Percent
Gender		
Male	60	12.0
Female	440	88.0
Ethnicity		
White or Caucasian	355	71.0
Black or African American	91	18.2
Hispanic or Latino	22	4.4
Asian	6	1.2
Other	23	4.6
Relationship status		
Single	103	20.6
Married	339	67.8
Separated	6	1.2
Divorced	42	8.4
Widowed	4	0.8
Other	4	0.8
I prefer not to respond	2	0.4
Employment status		
Unemployed	126	25.2
Part-time employed (< 35 hours)	125	25.0
Full-time employed (≥ 35 hours)	247	49.4
Total	498	99.6
System	2	0.4
Master's program		
Marriage and Family Therapy M.A.	98	19.6
Professional Counseling M.A.	234	46.8
School Counseling M.Ed.	168	33.6

Measures

Face-to-face opportunity, teaching alliance, peer rapport, professor rapport are the

independent variables examined in this study as influencing online and residential graduate

master of arts psychology/counseling students' outcome as seen in their intention to persist

(dependent variable). These IV's furthermore examine influencing students' likeliness as future

benefactors of distance education. These four independent variables and one dependent variable

are measured via a confidential and personally anonymous voluntarily chosen to participate by graduate psychology/counseling students. The survey notes there are no correct or incorrect replies and allows for uncertain and neutral replies. As a token of gratitude, all survey completers may opt into a random drawing to win one of four $50 gift cards or a $100 gift card from Amazon.com. This survey notes that survey responses are not connected to the incentive data.

This survey design entails independent variables encompassing headings that incorporate nine sections investigating the four independent variables and one dependent variable of this study. Section 1 of the survey scale examines the independent variables teaching alliance and professor rapport as measured by the COI online component (Garrison et al., 2000), AWAI (Baker, 2003; Schlosser & Gelso, 2001), NSSE (Shinde, 2010), and CCS (Rovai & Jordan, 2004) scales designed as Likert scale responses of 0 (strongly disagree) to 4 (strongly agree). These scales have items that are specifically designed to measure the COI online courses' (Arbaugh et al., 2008) learning elements of teaching presence, social presence, and cognitive presence. Survey question wordings are modified, specific to the teaching alliance relationship that still maintain the original COI scale measuring the residential and online learning community. To assess students' professor alliance and teaching alliance, survey questions such as, "My professors welcome my input in our discussions" and "I feel uncomfortable working with my professors" allow students both positive and negative emotional expression.

Section 2 of the survey scale examines students' perceptions of their educational program and is measured via CCS scale. Section 3 of the survey scale examines students' perceptions of their educational courses and their professors and is measured via the COI scale. Section 4 of the survey scale examines the educational teamwork alliance of students' bonding with peers and professors measuring COI's teaching presence, social presence, and cognitive presence. Section

5 of the survey scale examines rapport relationships of the learning community between and among peers and professors and is measured via the CCS scale. Section 6 of the survey scale examines established rapport between students and professors and is measured via the AWAI and CCS scales. Section 7 of the survey similarly measures scales while examining rapport established between peer-to-peer relations. Section 8 of the survey scale examines students' faith experiences. Section 9 of the survey scale examines students' learning environment satisfaction of peer and professor COI relations influencing both their intent to persist and students' likeliness as future benefactors of distance education.

- I heading assesses students to professors' rapport learning relationships as COI and AWAI measures.

- II heading assesses students' educational learning program perceptions as measured by CCS scale.

- III heading assesses students' perceptions of their educational courses and their professors and is measured via COI scale.

- IV heading assesses students' bonding alliance rapport with peers as well as professors and, university support as measured via COI, NSSE, and CSCI.

- V heading assesses students' perceptions of the learning community of academic peer and faculty interactions, supports, and collaborations as measured via the CCS and CSCI scales.

- VI heading assesses students views of professors rapport established between them as measured via the AWAI and CCS.

- VII heading assesses via same measures and examines rapport established between students and their academic peers.

- VIII heading assesses students' faith educational component and is measured via AWAI and CCS scales.

- IX heading assesses students' satisfaction regarding their educational program and, faculty as measured via the NSSE and CSCI scales.

Survey items that assess the nine headings above are herein sampled, along with the measures utilized identifying their Cronbach's alpha determining their historical reliability as a measurement scale.

Measurement Scales

National Survey of Student Engagement (NSSE)

The NSSE (2010) national benchmark scales rating the student-faculty interaction, the supportive campus environment, and the level of academic challenge are established range of .75–.78 alpha of internal consistency (Gordon et al., 2008). NSSE is referenced as a historically reliable measure of the survey headings previously identified. Survey items such as "Gained academic knowledge expected at your degree level" (IV) and "Availability for consultation with faculty" (IV).

The NSSE (2010) is a scale that measures students' social involvement in colleges. Also measuring students' retention, Shinde's (2010) research with the NSSE found the significant predictors of freshman retention alpha .70 or higher were social engagement and overall satisfaction at the university. It measures student engagement by using four themes (i.e., academic challenge, learning with peers, experiences with faculty, and campus environment) that each have subcategories (called engagement indicators).

In addition to the themes, the NSSE (2010) measures the presence of six specific practices (i.e., service-learning, learning community, research with faculty, internship or field experience, study abroad, and culminating senior experience) that are hypothesized to impact students in meaningful ways. Survey items have a variety of response formats. For scoring, all items are converted to 60-point scales, then the means of the engagement indicators subscales are calculated.

Community of Inquiry

The COI measurement scale is established as a historically reliable measure of the survey headings identified. Cronbach's alpha for the COI was .94 for teaching presence, .91 for social presence, and .95 for cognitive presence (Arbaugh et al., 2010). Along with the following measurement scales, the COI scale of WA and rapport relationships are previously detailed. To assess COI teaching alliance, social, and cognitive presence, survey questions such as, "My professors welcome my input in our discussions" and "I do not feel respected by my professors when we work together" allow students both positive and negative survey input measuring independent variables face-to-face opportunity, professor alliance and rapport, and teaching alliance.

Advisor Working Alliance Inventory

The AWAI measurement scale (Schlosser & Gelso, 2001) measures the graduate advising relationship rapport, apprenticeship, and identification-individuation from the student's perspective and has shown very good internal consistency reliability. The AWAI scale's established range for Cronbach's alpha is between .86 and .90 Cronbach's alpha to estimate

internal consistency. AWAI is a historically reliable measure of the survey headings professor rapport. Survey items such as, "How often have you communicated about career plans with a faculty member" and "How often have you discussed course topics, ideas, or concepts with a faculty member outside of class" assessed the advisor WA.

Intent to Persist

Intention to persist was measured with a single item, "As of today, I intend to complete this current degree program at Liberty University," on an 11-point scale from 0 (no) to 10 (definitely yes.)

Data Analysis

Ordinary least squares multiple regression and Pearson's r will be used to assess the research questions and hypotheses. Data analysis was performed using IBM SPSS Statistics Version 26 with the Hayes (2018) PROCESS macro 3.4 for SPSS (Bolin, 2014). The survey questions were moderated from historically reliable scales to measure the influence of the peer to peer, and professor to peer alliance relationship factor in DE. The hypothesis correlation evidenced in previous research relating the most effective element of change via clients' intention to persist, is the bonding alliance relationship between counselor and client. Thereby, this research model is extended to a new population of psychology/counseling graduate students' persistence and retention in DE, evidencing rapport and alliance affecting students' intention to persist in DE.

The independent variable face-to-face opportunity is reflected in the intensive model of learning in this DE study, considering WA, COI, and SCT theories as a correlation factor

analysis evidencing graduate students' intent to persist via the bonding alliance element of peer and professor relationships. Community of peers relationship alliance and faculty relationship alliance evidence teaching, social, and cognitive presence factors in the face-to-face opportunity, thereby linking DE correlation with students' intention to persist. This is measured via the AWAI, CCS, and the COI.

This study design is quasi-experimental since random assignment to groups was not conducted; the survey was specific to the volunteer population. DE research questions identify a positive, significant outcome of student persistence and institutional relationship between COI elements and NSSE subscales related to peer rapport and professor rapport. The elements of COI and the NSSE rapport subscales are correlated to students' intention to persist, and projection to become institutional benefactors. Third, the DE modality of online and face-to-face intensive is found to strengthen those relationships via the COI, AWAI, and the CSCI alliance factors examined in this study. And finally, teaching alliance and face-to-face interactions significantly affect the outcome of intention to persist to degree completion.

Furthermore, the data results address the research question, "How do NSSE subscales (Shinde, 2010) relate to peer rapport and professor rapport?" The index Faculty Accessibility, i.e., professor rapport, is minimally significant. The index Social Engagement, i.e., peer rapport, is found to be a significant predictor of college freshman retention along with overall satisfaction.

Data results show how the elements of COI and the NSSE rapport subscales relate to intention to persist and a projection to become institutional benefactors. The link between COI elements of teaching, social, cognitive presence, and NSSE's 11 surveyed indices measuring student engagement found significant predictors among higher education students' retention, i.e.,

intention to persist to become institutional benefactors, within these subscale indices. Linking COI's social presence and NSSE, both genders indicate social engagement as a significant predictor of intention to persist.

Section 9 of the survey further measures students as institutional benefactors by surveying "10 years from your degree completion, how likely is it that you will donate to this university?" and asks students' level of satisfaction with the educational program and faculty as measured by the NSSE and CSCI. The significant findings are found via questions such as, "Describe your institutional satisfaction regarding your current educational program," "Respond by rating the relevance of courses toward your degree," and "extracurricular activities associated with the university." Furthermore, "Rate tuition and fees associated with the program," and "availability for consultation with faculty" are included.

In Section 3, "Getting to know other course participants gives me a sense of belonging" is measured via the COI scale. This data reflects teaching presence influencing graduate students' psychology/counselor choice of education model (i.e., online, blended, and traditional educational formats) as related to students' COI and SCT elements. These data show significant findings linking COI and SCT, i.e., social presence is needed to establish cognitive presence. By surveying the research question, "Does DE modality of online, face-to-face, intensive mode of DE either attenuate or strengthen those relationships?" this study's hypothesis is supported, finding that the student-centered, COI factors of teaching presence and social presence are established within the blended model of education.

Data analysis indicates blended DE linking teamwork as an influencing factor to students' intention to persist. Section 4 explores, "During your time in your program, how often have you done the following?" followed by asking students about task alliances in relation to

peer, professor, and university faculty. The university is assessed as a supportive environment; this significant finding is measured via the CCS and the COI. Furthermore, survey sections four and five utilize the AWAI and CCS to measure the professor to student and peer to peer teamwork alliance as significant findings of rapport building interactions.

Chapter Three Summary

Chapter Three: Method utilized a correlational statistical test and a quasi-experiment. The purpose of the present alliance research is to validate the effective factors leading to graduate psychology/counseling DE students' intent to persist. This present research further establishes and extends COI research linking the alliance relationship, bonding between professor and student rapport, teaching alliance, and face-to-face opportunity leading to students' intent to persist. The intensive mode of DE, this study concurs, significantly determines students' relationship alliance, influencing their intention to persist.

The survey procedure investigates research questions examining the independent variables of face-to-face, teaching alliance, peer to peer, and peer to professor interaction alliance elements that are hypothesized as leading participants' intent to persist in DE psychology/counseling graduate education. The statistical correctional method follows a moderation model that examines the demographics of surveyed graduate psychology/counseling students' persistence and institutional identification in DE.

Chapter Four further describes these findings by addressing the research question results. The COI establishes teaching presence needing to be a predominate factor that is modified for future enhanced DE results that links students' intention to persist. As the analytical techniques are guided by the research questions, Chapter Four examines correlations between the measured

survey sections and their corresponding measurement subscales of COI, AWAI, CCS, NSSE, or

CSCI that are theoretically measuring similar constructs.

CHAPTER FOUR: RESULTS

The purpose of this study was to examine the how four-factor variables influence student and professor rapport relationships in strengthening graduate psychology/counseling students' intent to persist in DE. The four-factor variable chart became a modified mediation five-factor variable study that was assessed utilizing data from a student DE survey. This study added a fifth factor, the teaching alliance variable, that resulted in an insignificant finding due to possible COI redundancy. This random walk process of adding the fifth variable (Figure 2, Chapter 5) only to remove it later (Figure 1, Chapter 5) was to see if the variable added variance to students' intent to persist relationship alliance.

As an example, a car's engine needs gas to run, yet gas is not an added element to run a car; it is an essential element. Similarly, teaching alliance is not an added element in students' education alliance relationships, but it is essential to COI (Figure 1). COI defines teaching presence as a primary factor established before social presence and then follows cognitive presence.

This study used a sample of 500 graduate psychology/counseling students in a DE program. The students volunteered to anonymously complete a survey containing demographic items as well as questions assessing their DE experience with peer and professor rapport and factors influencing their intent to persist in their educational program. This chapter describes the

data analysis procedures used to examine whether the hypotheses were supported by the data. A summary of the findings is presented here.

RESULTS

The five variables examined were: COI (IV); Peer rapport (IV) relationships and Professor rapport (IV) relationships; Face to Face Opportunity (IV) moderating variable; and Teaching Alliance (IV) moderating variable; Intent To Persist in DE (DV) students continuance. First, this study examined whether COI was predictive of the development of rapport with both graduate psychology/counseling students and their professors. This study also proposed two moderation models. Model One (see Figure 1) proposed that face-to-face opportunity moderates the relationship between COI, peer rapport, and professor rapport, all variables affecting DE continuance outcomes. Model Two (see Figure 2) suggested that teaching alliance and face-to-face opportunity moderate the relationship between COI, peer rapport, and professor rapport, all variables affecting DE continuance outcomes. It was considered here that the hypothesized associated variance in professor rapport and student rapport would be predictive, with positive student outcomes including student satisfaction and ultimately students' educational intent to persist. Intention was rooted in a state of community and strengthened by both teaching alliance and face-to-face interaction.

Descriptive Statistics and Correlational Analysis

Data analysis was performed using IBM SPSS Statistics Version 26 with the Hayes (2019) PROCESS macro 3.4 for SPSS. Participants who did not complete all the items for any measure were excluded from the analysis. Participation in intensives was recoded to a

dichotomous item with 1 representing participation and 0 indicating nonparticipation. More than

half of the respondents did not respond to the intention to persist item. In addition, of those that

did respond to the intent to persist question, all but 23 of 263 responded (i.e., $N = 240$) with the

highest value (i.e., 10). Given the lack of variability and the nonresponse, all of the nonresponses

were recoded to 0. This provided the variability in the dependent variable to conduct the

analyses.

Analyses were conducted on both the original intent to persist item and the recoded item

to assess the impact of the recoding on the analyses. The pattern of statistical significance was

the same in each of the analyses, meaning results for intensives and COI patterns of significance

were the same with 500 or 263 responses. Only the recoded analyses are reported below. Prior to

the regression analyses, bivariate correlations for combinations of the study variables were

conducted using IBM SPSS Version 26.

It was hypothesized that COI would be predictive of the development of rapport with

both hypotheses: 1a students and 1b professors. These two hypothesized relationships were

assessed by first examining Pearson's r zero-order correlations (i.e., with no other variables

involved; see Table 2). COI was positively correlated ($p < .01$) with both NSSE-Professor ($r =$

.293), and NSSE-Student ($r = .193$).

Table 2

Pearson's rs, Means, Standard Deviations, and Cronbach's αs of Study Variables

	1	2	3	4	5	6
(1) Intent to Persist	1					
(2) COI	-.015	1				
(3) Intensive (Y/N) F to F	.010	-.034	1			
(4) Professor Working Alliance	-.045	.583**	-.025	1		
(5) NSSE-Student	-.018	.193**	.417**	.126**	1	
(6) NSSE-Professor	.075	.293**	.115**	.156**	.434**	1
Mean	4.43	3.12	0.69	4.44	2.93	2.16
SD	4.90	0.48	0.46	0.51	2.25	2.00
Cronbach's α		.96		.88	.84	.74

**Correlation is significant at the 0.01 level (2-tailed).

Second, COI was entered into regression analyses (see Table 3) with professor working alliance and intensive participation as additional predictors of NSSE-Professor and NSSE-Student. COI accounted for statistically significant variance in both NSSE-Professor and NSSE-Student ($p < .001$), after accounting for the professor working alliance and intensive participation. Hypotheses 1a and 1b were supported. These results emphasize the importance of COI on the development of bonds with both professors and students.

Table 3

Model Results: NSSE-Professor

	B	Se	t	P	% CI	
					LL	UL
Constant	2.120	0.096	22.103	< .001	1.932	2.309
COI *	1.229	0.217	5.671	< .001	0.803	1.654
Working Alliance	0.035	0.211	0.166	.870	-0.38	0.450
COI X Working Alliance	0.345	0.316	1.092	.280	-0.276	0.966
Intensive * F to F	0.602	0.212	2.845	.010	0.186	1.018
COI X Intensive	0.647	0.488	1.326	.190	-0.311	1.606
Working Alliance X Intensive	0.535	0.458	1.167	.240	-0.365	1.436
COI X Working Alliance X Intensive	-0.414	0.685	-0.605	.550	-1.759	0.931

Note. $R = .347$, $R^2 = .120$, MSE = 3.569, $F(7, 492) = 9.624$, $p = < .001$.
*

Model Results: NSSE-Student

	B	Se	t	P	% CI	
					LL	UL
Constant	2.889	0.101	28.584	< .001	2.690	3.088
COI *	0.870	0.228	3.81	< .001	0.421	1.318
Working Alliance	0.203	0.223	0.911	.360	-0.235	0.640
COI X Working Alliance	0.336	0.333	1.01	.310	-0.318	0.991
Intensive * F to F	2.074	0.223	9.297	< .001	1.635	2.512
COI X Intensive	0.575	0.514	1.119	.260	-0.435	1.585
Working Alliance X Intensive	0.501	0.483	1.038	.300	-0.448	1.450
COI X Working Alliance X Intensive	-0.032	0.721	-0.044	.970	-1.449	1.385

Note. $R = .479$, $R^2 = .229$, MSE = 3.962, $F(7, 492) = 20.889$, $p < .001$
*

Model Results: Intention to Persist

	B	Se	t	P	% CI	
					LL	*UL*
Constant	4.317	0.429	10.056	< .001	3.473	5.160
COI	-0.049	0.583	-0.084	.930	-1.195	1.096
NSSE-Professor *	0.277	0.126	2.192	.030	0.029	0.526
NSSE-Student	-0.148	0.120	-1.235	.220	-0.384	0.088
Working Alliance	-0.552	0.550	-1.005	.320	-1.632	0.528
COI X Working Alliance	-0.329	0.823	-0.399	.690	-1.946	1.288
Intensive= F to F	0.213	0.597	0.357	.720	-0.960	1.386
COI X Intensive	0.471	1.271	0.371	.710	-2.026	2.968
Working Alliance X Intensive	-0.657	1.193	-0.551	.580	-3.002	1.687
COI X Working Alliance X Intensive	0.214	1.780	0.120	.900	-3.283	3.711

Note. $R = .115$, $R^2 = .013$, MSE = 24.106, $F(9, 490) = 0.733$, $p = .679$
*

It was hypothesized that face-to-face interaction and professor-student WA strengthen the relationship between COI and the development of rapport between students and their peers and professors. Intensive participation, as assessed in the regression analyses, was statistically significant for both professor ($p = .010$) and student ($p < .001$). Working alliance/teaching alliance was NOT statistically significant to strengthen the relationship in neither the professor nor student regression models.

Interestingly, even though WA was significantly positively related to both NSSE-Professor ($r = .156$) and NSSE-Student ($r = .126$) as assessed by Pearson's r, it was not significantly related to either mediator (professor or student) after all predictors were included. It is likely that the similarity between the AWAI and COI measures may account for the same variance in each of the variable/mediators. As indicated by the regression analysis R^2, with total 5 variables combined $= R$, then squared $= R^2$, so to compare variable outcomes via percent, the students assessed predicted 22.9% of the variance in relationships ($p < .001$). And R^2 from the

students' viewpoint of professors predicted 12% of the variance in relationships ($p < .001$). Although hypotheses 2a, face-to-face interactions, and 2b, WA, were not supported, this research finding indicates the value of face-to-face interactions in intensives to enhance blended DE via strengthened professor and peer relationship factors.

Relationships matter, as it was hypothesized (as previously suggested in Cain et al., 2003; Sorden, 2013; and Zilka et al., 2018) that face-to-face interaction and professor-student WA strengthen the relationship between COI and the development of rapport between students and their peers and professors. Additionally, WA/TA H2b may already be accounted for in the variance, i.e., repeated variance, in COI significant relationship rapport. As in the WA/TA H2b nonsignificant outcome of relationship rapport building, it is hypothesized as assessed by Pearson's r data outcome that COI Pearson's r with WA/TA $r = .583$ significance that a high shared variance, i.e., as teaching alliance is already accounted for within COI. This may account for the overlapping variance in COI resulting in WA/TA nonsignificant findings.

It was considered that the hypothesized associated variance in professor rapport and student rapport would be predictive with positive student outcomes, including student satisfaction and ultimately students' educational intent to persist, and that intention was rooted in COI as a sense of community and strengthened by both teaching alliance and face-to-face interaction. This is a moderated-mediation hypothesis and requires that there be a significant relationship between NSSE-Professor and/or NSSE-Student after the variance is accounted for by all other predictors. In addition, it requires that hypothesis 2 was supported. As found in the analyses related to the moderation-mediation hypothesis 2a that was significantly supported, linking both the intensive participation relationship between COI, and NSSE-Professor and NSSE-Student rapport. Although, in hypothesis 2b, neither the relationship between COI and

NSSE-Professor nor NSSE-Student was conditional on professor WA. This WA/TA H2b insignificance is a probable redundancy due to repeated variance factor already accounted for within COI.

H3a and H3b (seen in Table 3) were not supported as the remaining element of research question 2 was assessed, whether the direct effect of COI on the intention to persist was conditional in any way on intensive participation and WA/TA. Only NSSE-Professor was a significant predictor of intent to persist (see Table 3). This suggests that the relationship between professors and students may be a key element in a student's persistence to finish an educational program.

Chapter Four Summary

The COI Pearson's *r* was found to be positively correlated with both NSSE-Professor and NSSE-Student. This result supports the theory that COI teaching alliance establishes teaching presence, which needs to be a predominant factor that is modified for future enhanced DE results that links students' intention to persist. Teaching alliance alone was not found significant to moderate COI, peer rapport, and professor rapport. Although teaching alliance in Model Two did not have moderated significance in the regression analysis, Pearson's *r* does establish that teaching alliance and COI are significantly related ($r = .583$). Therefore, it is possible that the variance in teaching alliance is accounted for within COI and therefore does not show as significant in the regression analysis.

Additional support was found in the regression analysis for COI significance ($p < .001$) measured for both student and professor connectedness. COI is established in the research as teaching alliance prevalence for effectiveness in DE with social presence, then following with

cognitive presence. Thus, Pearson's $r = .434$ is significant at .01 level for the NSSE professor variable. Also, in the regression analysis, only the NSSE Professor variable, $p = .03$, was found to be significant to intent to persist.

Model one was found to be a significant measure of intensives' mode of face-to-face opportunity, moderating the relationship between COI, peer rapport, and professor rapport. These factors of supportive relationships with both professors and students, leading to students' continuance in the DE program, were significant in the regression analysis, indicating the intensive modality of DE success. Also, this significance was found in the regression analysis the NSSE-Professor COI relationship significance outcome of intent to persist. Only NSSE-Professor was a significant predictor of intent to persist (see Table 3). This suggests that the relationship between professors and students may be a key element in a student's completion of an educational program. These five factors of significance for DE relationship effectiveness longevity supports students' likelihood of continuance for their higher education degree completion and graduation.

CHAPTER FIVE: DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this study was to explore the association between the DE relationship variables of COI relationships, teaching alliance, student bonding, professor rapport, and impact of face-to-face learning to examine DE psychology/counseling graduate students' factors leading to their intention to persist. Chapter Five is a discussion of the results that in DE, following these five factors, WA/TA development can lead to intent to persist via graduate psychology/counseling students' relationship bonding alliances.

The social relevance of bonding alliances establishes the need for the quality education of counselors in alliance factors that are linked with psychology/counseling persistence. Considering the reality of the modality of DE counseling programs, this study shows its effectiveness in establishing educational relationships (Beomkyu, 2016; Benshoff & Gibbons, 2011). Emotional intelligence is revealed in bonding alliances as researched by Goleman, D. (2006). Educators should model caring, respectful interactions with students to influence bonding relationships as consistent with psychology/counseling graduate students DE persistence. In order to build a sense of community at a distance, Rovai, A. (2002) researches course design principles that facilitate dialogue and decrease psychological distance, thereby increasing a sense of community among learners. Further evidence is provided (Rovai, A. P., & Jordan, H. M. (2004) suggesting that blended courses produce a stronger sense of community among students than either traditional or fully online courses.

This premise establishes a need for this study identifying the graduate psychology/counseling students' intention to persist to degree completion. This DE modality, as surveyed, produces increased educational success that is related to increased educational intention to persist. Identifying the factors that link counselors' growth alliance rapport and bonding relationships to educational rapport and bonding relationships, another socially relevant population is considered.

The bonding alliances were evidenced in four DE relationship variables studied. The social relationship environment is consistent with this study's relationship strength as seen in both human psychology and animal species. The Rat Park environment experiment serves as an example, as rats in social environments bonded to the outcome of positive relationships, as the social environment kept the rats returning. The social environment is consistent with DE intent to persist bonding COI environment.

- Bonding alliances are repeated to benefit the isolated drug and alcohol populations versus the bonding community. In the classic Rat Park experiment (Hercz, 2007), the bonding community and associated socialization support environment were effective in discouraging addictive patterns. Rats in isolated cages choose the harmful behaviors of ingesting daily morphine. Conversely, as evidenced, rats behaviors in a social environment, not in isolation, were free from addiction, choosing social pleasures over harmful drug amounts (Alexander et al., 1978, 1981). Healthier behavioral choices are illustrated in the Rat Park community.

The importance of bonding environments is proposed in this study as a needed element for graduate students' intention to persist. Current DE graduate students' degree completion rates

are lessening due to the extended length of degree completion time (Ferrer de Valero, 2001). This premise establishes a need for this study on graduate psychology/counseling students' intention to persist to degree completion. This DE modality, as surveyed, produces increased educational success that is related to increased educational intention to persist.

The four-factor variable chart became a modified mediation five-factor variable study that was assessed utilizing data from a student DE survey. This study added the fifth variable (Figure 2) only to remove it later (Figure 1) to determine if it added variance to students' intent to persist and relationship alliance. . Similar to a car's engine needing gas to run, yet gas is not an added element to run a car, rather it is an essential element , teaching alliance is not an added element in students' education alliance relationships but is essential in the COI element (Figure 1). The teaching alliance variable was examined to see if it added variance to students' intent to persist relationship alliance.

The five variables examined were: COI; Face-to-Face Opportunity; Teaching Alliance; Peer Rapport; Professor Rapport. First, this study examined whether COI is predictive of the development of rapport of students with both graduate psychology/counseling students and professors. This study also proposed two moderation models. Model One proposed that face-to-face opportunity moderates the relationship between COI, peer rapport, and professor rapport, DE continuance outcomes. Model Two suggested that teaching alliance and face-to-face opportunity moderated the relationship between COI, peer rapport, and professor rapport, all variables affecting DE continuance outcomes.

Summary of Findings and Implications
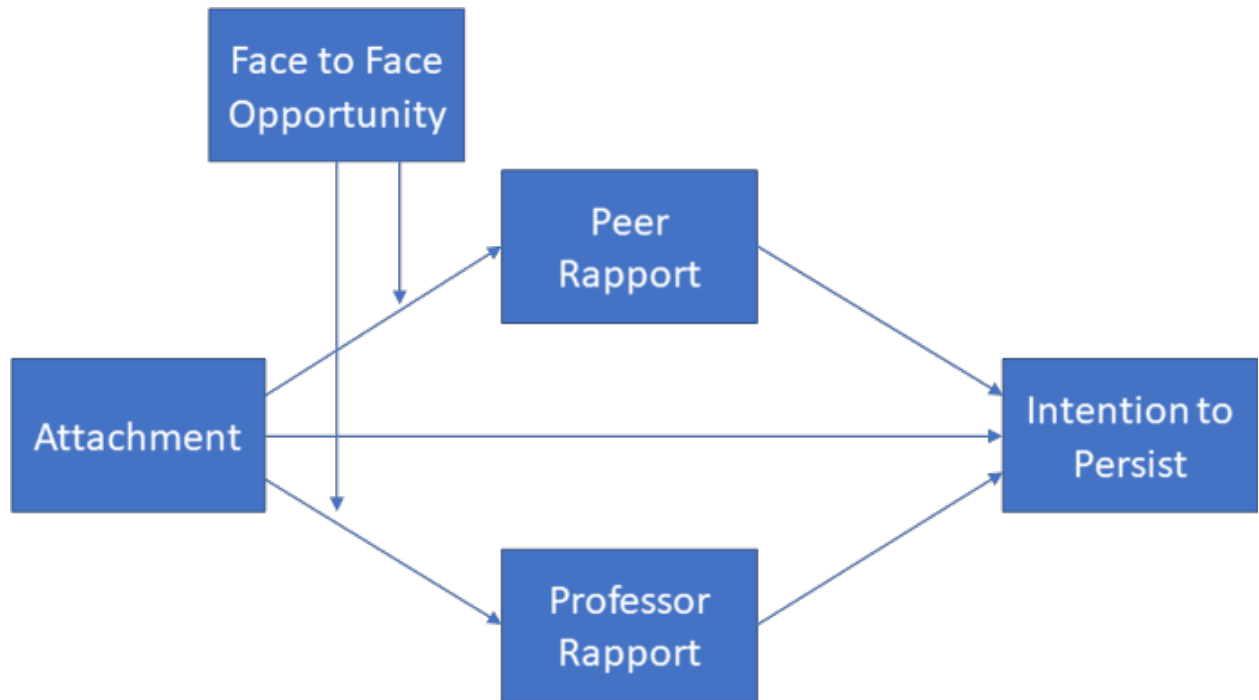
Figure 1/ Model One

Research supports the assertion that rapport (i.e., attachment) relationships lead to intention to persist. Additional study implications of education retention factors benefit these findings (Shinde, 2010) and are linked to higher income earnings, workplace satisfaction, and overall economic benefits for graduates. Greater relationship satisfaction with self and family are added personal benefits for students who intend to persist with their educational pursuits.
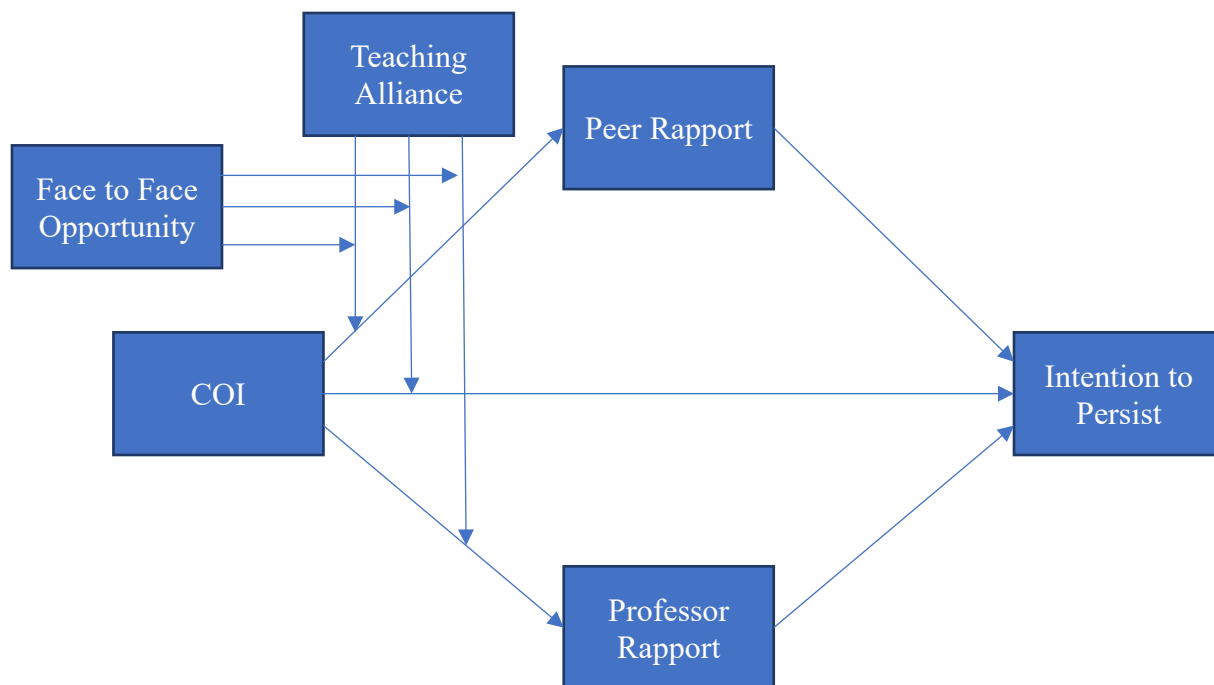
Figure 2/ Model Two

Community of Inquiry

It was hypothesized that the COI would be predictive of the development of rapport with both students and professors. These two hypothesized relationships were assessed by first examining Pearson's *r* zero-order correlations (i.e., with no other variables involved; see Table 2). COI was positively correlated ($p < .01$) with both NSSE-Professor ($r = .293$), and NSSE-Student ($r = .193$).

In educational contexts, peer relationships also consistently demonstrate a positive association with persistence and academic performance (Akyol & Garrison, 2011; Benshoff & Gibbons, 2011; Beuchot & Bullen, 2005; Boston et al., 2010; Braxton, 2019; Fraley et al., 2011; Garrison, 2007; Garrison & Arbaugh, 2007; Haythornthwaite et al., 2000a; Horvath & Greenberg, 1994; McCarthy et al., 1990; Poon, 2013; Rovai & Jordan, 2004; Toste et al., 2010). As this study evidences, the development of a working relationship between graduate

psychology/counseling students and their COI and their professors in DE will result in positive student educational outcomes of persistence and strong academic performance.

A correlation model was used to assess the relationship factor of students' social bonding and teacher presence in students' COI within DE. This study proposed that the development of a working relationship bond among student peers and between students and their professors will result in positive educational outcomes. Specifically, four variables were examined, and an increase was found in graduate psychology/counseling students' intention to persist, and a strengthening of the relationship experience between intensive students and their professors was identified as proposed to be evidenced in the face-to-face relationship intensive model of blended DE.

This DE study supports its hypotheses that as students' social bonding and teacher presence in students' COI (Akyol & Garrison, 2011; Arbaugh, 2007; Baker, 2003; Boston et al., 2010; Swan et al., 2009) within the WA in DE increase, students will become more satisfied with their educational experiences (although not assessed in this study). This research would benefit the DE field as it seeks to identify the factors that account for the WA between professors and graduate students that enhances their intent to persist and educational empowerment.

Furthermore, this study's findings support Poon's (2013) research review that focused on the shift in the instructional model from lecture centered to student centered. The student-centered interactional model exemplifies a strong sense of community, as defined by Sergiovanni (1994), rather than as academic organizations, and this community is expanded by Rovai and Jordan (2004). Sergiovanni stressed the need for authentic community in the student-centered interactional model in blended learning, a tie binding students and professors through shared values, ideals, and goals.

This DE study reflects the COI social environment which graduate students as surveyed relationship variables to affect their intent to persist to degree completion. It is the COI environment as a psychological hook that has powerful influence on one's intention to persist. Consistent with this study, additional research, Alexander (2012,*a*) supports the powerful attuned alliance, with the bonding relationship affecting intention to persist.

As an example of the importance of relational bonding in another context, addictions research, DeGrandpre (2006) studied nicotine patches. The power of bonding to environment showed evidence of being stronger than smokers' chemical addiction, as 17.7% stopped addiction with a patch but 82.3% continued smoking. Physical dependence with withdrawal symptoms was not the primary predictor of the ability to stop smoking. Rather, it seems that addiction occurs due to its other mental health effects, such as making one feel calmer or stimulated, but it is not the chemical that creates the addiction.

It is the psychological relationship that keeps smokers addicted Alexander (2012,*b)*. Positively speaking, as related to this study, it would follow that it is the draw of the psychological relationship (the COI environment) that has powerful influences on one's intention to persist.

COI is a significant finding in this study on intent to persist. The implications of this study on education retention are reflected via relationship factors of significance found in continuance support with COI, peer rapport, professor rapport, and the face-to-face opportunity learning modality. And COI is effectively shown to prioritize teaching alliance, before social bonding and then cognitive presence can occur.

Face-to-Face Opportunity in Distance Education

Intensives allow for student-to-student and student-to-professor in-person interactions. As reflected in the COI significant results above, teaching alliance may be measured within that context. Additional research with teaching alliance as the independent variable is suggested, as it would result in a separate significance finding on its effect on DE students' intent to persist.

Relationships' power of educational retention is a ubiquitous finding and is consistent with research that shows oxytocin bonding is released in relationships (Hall & Weier, 2017; Hercz, 2007). This resulting dopamine (i.e., pleasure) bonding of relationships influences intent to persist in extended populations. The dopamine released via relationship support is evidenced in Vietnam veterans' recovery from posttraumatic stress disorder (Hall & Weier, 2017).

Hercz (2007) further researches behavior management findings in positive addictions that are exampled via bonding and addictions recovery populations too. The findings extend to group therapy as is also effective with universal relationship bonding power with support groups such as Weight Watchers, AA, and Al-Anon.

Bonding's power was found in the WA between professor and student and between student and student in the DE environment. Furthermore, as TA research shows (Luczaj, 2010), the power of client growth within the TA and bonding relationship environment may furthermore extend to addictions populations, such as drug and alcohol populations and animals (e.g., the isolated versus the community in the Rat Park).

Adaptations due to COVID-19 have caused many DE classes to meet face-to-face via Zoom. Without the previous on-campus meetings and shared meals, student rapport and professor relationships are maintained yet minimized. This study's participants were surveyed prior to COVID-19. To further understand the effects of synchronous DE, such as live video conferencing, more research is essential.

Teaching Alliance

The first foundational proposition of this study is supported in that professor-student alliance relationships are a key component to a graduate student's success. Relationship alliance is researched by Horvath and Bedi (2002) as the quality and strength of the collaborative relationship.

Teaching alliance is suggested as a future research factor in students' intent to persist. These research findings suggest that only NSSE-Professor was a significant predictor of the intent to persist in the regression analysis (see Table 3) for students. This suggests that the relationship between professors and students may be a key element in a student's completion of an educational program.

The four-factor variable chart in Figure 1 became a modified mediation five-factor with the addition of teaching alliance as a variable Figure 2 after data from a student DE survey were assessed. This study's findings conclude that all four factors of COI, peer rapport, professor rapport, and face-to-face opportunity are significant in creating a relationship bonding environment. However, teaching alliance was not found as a significant factor when regression data were considered; COI already accounted for teaching presence variance. Yet Pearson's r did account for teaching alliance as a significant finding. This implication of the nonsignificant regression of teaching alliance may be due to redundant variance within COI, which was already accounted for.

This study's relationship variable findings further support educational persistence as consistent with the relationship findings of the APA Steering Committee Task Force 2001's psychotherapy research (Golden, 2004). The APA's research found that there are four elements

present in successful therapy relationships: therapeutic alliance, empathy, goal consensus and collaboration. and cohesion in group therapy. These elements are consistent with therapeutic growth relationships, which is correlated with effective group therapy. This study applies similar ideas to DE in regard to the peer and professor relationship quality.

The findings from this DE study expand upon and support prior psychological research by further examining the factors associated with therapeutic bonding relationships. Consistent with previous research, two types of relationships were shown to lead to intent to persist in psychology and counseling graduate students in DE programs: peer rapport and bonding in COI relationships and professor rapport. These relationship support factors are consistent with previous findings on alliance in the counseling relationship between therapist and client and client outside supportive relationships as seen in intent to persist (e.g., Lambert & Barley, 2001). Further research is needed to clarify whether graduate counseling DE student-professor relationship variables predict subsequent client-therapist relationship variables.

Limitations

This study did not follow a longitudinal design; it utilized a correlational design and cross-sectional sampling. Therefore, it is not possible to test causal relationships between the variables. Also, as a method limitation, the survey developed for this study employed empirically validated measures of the independent variables presumed to affect the dependent variable of graduate psychology/counseling DE students' intention to persist. The results obtained in the present study are limited to a single, private university. The findings are limited as the results are dependent upon the openness and honesty of the participants, which may provide some degree of error due to potential difficulty remembering the foci assessed within each surveyed course

relationship due to time factors for students. These issues raise concerns regarding the validity of the statistical conclusions and were considered when reviewing results.

The ability to generalize findings beyond the present study is limited because the DE graduate psychology/counseling participants who were surveyed were all from the same university. No other universities were sampled. The DE learner characteristics, DE program factors, and pedagogy of the DE program in the present study may not be representative of other universities' DE programs. Also, the blended learning intensive model may not generalize findings to other educational formats, as the intensive model of DE may not be available at other DE universities. Furthermore, traditional education formats may need to be considered in future research, as the educational institution in this study had a limited available population at the time of survey to assess relationship as a valid independent variable associated with graduate psychology/counseling students' intention to persist. Additionally, the researchers exercised no experimental control over the courses examined in the present study, and cause-and-effect relationships were appropriately not confirmed.

This study is a correlational study. To avoid selection bias as a threat to internal validity, random assignment was not employed. Selection bias is a limitation due to selection history events, such as political events in time affecting one group versus another, which may sway students' participation at the time of survey assessment. Furthermore, this study did not utilize control groups, which allows for a history/maturation/testing threat to its internal validity.

The accuracy of this study's survey results depends upon graduate psychology/counseling students' memory of their DE face-to-face program and peer and professor relationships. Therefore, history is noted as an internal threat to validity, as environmental stressors, such as

weather events, news, and world crises, may have occurred, causing an invalid memory of relationships.

External validity threats of stimulus characteristics and settings, the reactivity of the experimental arrangements, and timing of measurement are considered as possible limitations to this study. Each group's survey environment must be consistent to avoid stimulus characteristics and settings as an external validity threat to avoid a Type II error, i.e., claiming relationships were not a valid factor for DE students to persist, yet these DE relationships were correlated. This study's survey was e-mailed to each student, thereby controlling for stimulus characteristics and experimental settings as an experimental threat. However, students may be more engaged from one institutional setting, or the conditions in which the participants took the survey may not have been similar in quietness. Therefore, stimulus characteristics and settings may not be able to be controlled between all groups to avoid a Type II error. This study may be limited to this student sample, a threat to external validity.

To ensure the validity of the results, survey participants must avoid giving responses in an effort to obtain a reward. The survey offered participants a reward just for participating, thereby holding motivation levels constant to avoid threats to external validity. However, students may still be affected by a desire to respond favorably, and their responses may not reflect their true feelings. The COI change presented in this study may affect this COI's application method within this institution, thereby allowing for a Type I error if the COI method of application is not similar to other institutions. Finally, the timing of measurement may be found to be an external validity threat if long-term follow-up is not conducted, yet significant survey results are found. This would be apparent if graduate psychology/counseling students did not persist to contribute as future institutional benefactors.

As mentioned earlier, students find procrastination to be a limitation in their DE environmental success. Recommendations for future research are made in the following section. However, relationships are indicated as solutions to many DE higher education students' needs.

Doctoral students specifically may encounter obstacles completing their dissertations. The expression "all but dissertation" in regard to doctoral students reflects their exceedingly high drop-out rates. Limitations addressed previously may be addressed with future research.

Suggestions for Future Research

As an extension of this study's dependent variable, it is suggested that future research examine the association between religious affiliation and higher education choice and students' motivational factor of God control association with their intention to persist. Secondly, DE students emphasized that procrastination is especially harmful in the DE environment. Research specific to the DE population is suggested in addition to the existing traditional graduate students study. Several suggestions for effective graduate student strategies for overcoming procrastination are: develop relationships by networking with classmates, ask questions without hesitation, get to know the online library well, ensure technology is reliable, set goals, create a comfortable study area, and occasionally reward oneself. Self-discipline and self-directedness were seen as essential.

Learning satisfaction specific to psychology/counseling online graduate students in the USA may be extended from the Canadian research asynchronous environment study (Beomkyu Choi, 2016). This DE recommended future research on learning satisfaction is specific to psychology/counseling clinical work and extended from existing social work DE versus traditional environments (Cummings, Foels, & Chaffin, 2013).

The doctoral students DE relationship is significant to teaching alliance as research evidences in this study's findings. NSSE Professor to students relationship factor outcome is the only factor significant that influences DE students intent to persist. Thereby, future research is suggested to develop the factors found to enhance those bonding relationships. Current dissertation specific studies exist without DE students … First, it was recommended that the dissertation chair to emphasize timely, effective, and proactive communication with students. It was also suggested that the chair clarify relationship roles and timelines, ask critical questions and provide timely feedback, and assist in goal setting. Students recommended the chair guide the research process with examples and provide encouragement, praise, and support to build the supervisory rapport.

Since face-to-face intensives and COI were found to be effective relationship factors that contribute positively to graduate psychology/counseling students' intention to persist in their counseling education, and since NSSE-Professor relations to student was also the only significant factor in intent to persist, a future study is recommended with a face-to-face COI format allowing teaching presence to be structured more effectively. As established research has been presented here, teaching presence, followed by social and cognitive presence in COI learning, accounts for the most COI variability in educational development.

It is proposed that future research examines an alternative causal sequence as TA/WA is COI sequenced as a priority relationship. COI sequencing establishes teaching presence in priority, followed by social presence, then cognitive learning. As TA/WA is established, professor and student rapport increases, which creates a positive COI learning environment. Next, in COI priority of effective learning is the socialization element, i.e., bonding occurs between peers and professor. The COI social presence allows for bonding attunement

relationships to be established via TA/WA. This positive COI learning environment results in graduate psychology/counseling students' intent to persist due to the applied causal sequence of cognitive presence.

The ubiquity of relationships is seen in educational and social growth contexts within various populations' bonding environments. As related to the purpose of this study, research further establishes that social contact alliances and interaction are necessary elements for effective DE in psychology/counselor education. As may also be considered here, future research may impact the effectiveness of teacher presence and student bonding within DE when WA, setting, and professors' experience are examined.

As consistent with WA relationships evidenced in intent to persist for counseling students' participating in DE, psychotherapy research has shown that the quality of the alliance is the most robust predictor of treatment success (Muran & Barber, 2010). TA is considered important for successful counseling experiences, according to Mahaffey and Granello (2007). Future research is needed to examine diverse populations and to show how therapist DE and COI experience affect therapeutic setting and TA.

Field Implications

This study has considered the existing bonding environment of therapeutic helping as a model for the effect of relationships on the intent to persist. This bonding relationship alliance is present between professor and student and between counselor and client.

For Counselor Educators and Supervisors

WA between counselor educators and students was examined in Corbin's study (2011). Improving the ability to understand one another and communicate more optimally and

effectively would seem highly relevant, notes Corbin, especially in relation to the art of counseling. As per Carey et al. (1988), communication is an important component in developing a better supervisory relationship and promoting greater learning for counselor trainees. Similarly, examining other types of domains (e.g., counselor education) where a WA is developed between the "customer" and provider is a logical extension of these findings. Investigating and discovering new ways of improving and enhancing counselor education and supervision is a salient factor for future research in the continuing development of the profession of counseling.

For Counselors

As Tatkin's (2009) research suggests, the relationships of support save one's intent to persist. As applied to this study, educationally and therapeutically, a student's career in helping others to grow and heal is to project secure rapport in those goal-oriented bonding relationships. This bonding relationship alliance is exemplified between professor and student and between counselor and client. Tatkin's research shows that it is the environment that heals, as relationship growth is consistent with psychological healing, which cannot occur where all are wounded.

Chapter Five Summary

The ubiquity of relationships is seen in educational and social growth contexts within various populations' bonding environments. As related to the purpose of this study, research further establishes that social contact alliances and interaction are necessary elements for effective DE in psychology/counselor education. As may also be considered here, future research may impact the effectiveness of teacher presence and student bonding within DE when WA setting and professors' experience are examined.

Results address whether the direct effect of COI on the intention to persist was contingent in any way on intensive participation and TA/WA. Only NSSE-Professor was a significant predictor of intent to persist (see Table 3). This suggests that the relationship between professors and students may be a key element in students' completion of an educational program

The findings of this DE study expand upon and support prior psychological research on the associated factors within therapeutic bonding relationships. Consistent with previous research, two types of relationships were shown to lead to intent to persist in psychology and counseling graduate students in DO programs: peer rapport and bonding in COI relationships and professor rapport. These relationship support factors are consistent with previous work on alliance in the counseling relationship between the therapist and client and the client's outside supportive relationships as seen in intent to persist.

The four-factor variable chart became a modified mediation five-factor variable model that was assessed utilizing data from a student DE survey. This study added the fifth variable (Figure 2) only to remove it later (Figure 1) in order to determine if the fifth variable added variance to students' intent to persist relationship alliance. It was found that teaching alliance is not an added element in students' education alliance relationships but is included in the COI element (Figure 1).

The five variables examined were: COI affecting the relationships of peer rapport and professor rapport, the moderating mediations of face-to-face opportunity, and the teaching alliance's effect on the outcome of students intent to persist in DE. First, this study examined the COI as predictive of the development of rapport with both graduate psychology/counseling students and their professors. This study also proposed two moderation models. Model One proposed that face-to-face opportunity moderates the relationship between COI, peer rapport,

and professor rapport, DE continuance outcomes. Model One was supported, linking those relationship factors as evidencing psychology/counseling graduate students' intent to persist in DE. Model Two suggested that teaching alliance may not have been evidenced here as a significant finding due to its redundant variance in COI as having teaching presence as an effective primary relevance as already measured.

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