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EXPLORING HOW DEVELOPMENTAL EDUCATION STUDENTS MAKE MEANING OF IDENTITY, COMPETENCE, AND RELATIONSHIP BUILDING THROUGH SUPPLEMENTAL INSTRUCTION: A GROUNDED THEORY STUDY

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by

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Dedication

I would like to dedicate this manuscript to my daughter Elaina for her unconditional love and unwavering support, for being my champion and reminding me always that I could, providing me with boundless motivation, and for always being willing to read my endless pages; to little peanut, I love you already; and to my husband Nicky, while incredibly missed, providing me with the wings to fly.

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Abstract

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The purpose of this constructivist grounded theory study was to explore Supplemental Instruction (SI) beyond its academic purpose, examining how community college developmental education students make meaning of their experience participating in SI. This study focused on how developmental education students experienced identity and competence through SI and examined how these students make meaning of their connections and relationships. Fifteen participants who placed below college-level in English and English Language Proficiency and who were enrolled in at least one college-level course with SI participated in semi-structured interviews and SI group observations.

The findings support the need to integrate holistic support into academic supports to shift institutions towards a more interconnected learning process. Through a grounded theory methodology, *The Supplemental Instruction Culture of Care Model* emerged. The Model demonstrates how SI promotes peer-to-peer interactions, facilitates the exposure of the students' impediments, and builds universality creating a culture of care.

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Chapter 1

Introduction

Supplemental Instruction, or SI, has become a popular academic enhancement and enrichment support tool for students who place below college-level. As an adjunctive approach to understanding course material, SI is designed to offer students the tools to address learning strategies. SI originated with historically difficult courses, creating a collaborative peer-driven out-of-class learning environment (University of Missouri-Kansas City [UMKC], 2020). Initially developed to target challenging courses (Martin & Arendale, 1990; Arendale, 1994), student success models at community colleges have implemented supplemental instruction for high-risk students or developmental education students with the intention of advancing academic attainment (Bailey, Jaggars, & Jenkins, 2015).

Approximately 68% of students entering college take one or more developmental courses. According to the Community College Resource Center (CCRC) (2019), within the past decade, overall, about 59% of students entering community college placed at developmental levels in math and about 33% in English. Fifty-eight percent of high school graduates nationally, who registered for community college, tested below college-level in at least one area (Attewell et al., 2006). In 2016, the US Department of Education reported that 78% of Black students and 75% of Latinx students entering community college tested at a developmental level, with 76% of these students coming from the lowest income group (Chen & Simone, 2016). In a study of 57 community colleges participating in the Achieving the Dream initiative, the CCRC (2019) reported that only 33% of students who test at the developmental level in math and 46% who test at the

developmental level in English go on to complete the developmental course sequence and continue to college-level (Bailey, Jeong, & Cho, 2009; Complete College America, 2011; Fong et al., 2017).

Supplemental instruction programs have become a method for allowing students who test at a developmental level to enroll in college-level courses (Martin & Arendale, 1990; Arendale, 1994; UMKC, 2020). Using trained peer-leaders, SI facilitates improved communication in the classroom and provides enhanced academic connections between the instructor and the students (Martin & Arendale, 1990; Arendale, 1994; UMKC, 2020). Students tend to believe, listen, and often respond to each other in ways that foster truth. When dealing with authority figures, especially faculty, students naturally look to minimize or eliminate disappointment, often making it difficult to tell the authority figure the truth about what is needed to foster success (Plaskett, Bali, Nakkula, & Harris, 2018). SI leadership helps facilitate critical thinking and offers opportunities to reduce intimidation, creating an inclusive environment (Zaritsky & Toce, 2006; Skoglund, Wall, & Kiene, 2018).

Designed to use peer-assisted learning, SI encapsulates an active learning process that helps students discover the importance of learner involvement (Ning & Downing, 2010). Ning and Downing (2010) emphasize, “as the learner is involved in shaping both the learning environment and the content of learning by posing and pursuing questions, they become more able to solve problems” (p. 922). When students work with other students, opportunities are presented for learner involvement (Ning & Downing, 2010). Learner involvement provides students with a learning environment complete with direct

responses and feedback, ultimately "improving their problem-solving skills in collaborative tasks" (Ning & Downing, 2010).

This study aimed to explore how students placed in developmental education make meaning of their experiences in SI. The exploration of meaning-making for developmental education students, who engage in SI, aimed to conceptualize holistic support and peer-to-peer involvement in learning. Furthermore, this study sought to discover concepts that support identity, competence, and relationship building. I anticipated that the knowledge engendered from this study would generate new insights about supplemental instruction as a holistic student success model. Additionally, I hoped to inform nascent policy and practice for community college professionals addressing the importance of holistic support for community college students who place at the developmental level.

Problem Statement

Assessment of student needs beyond academic preparedness has become a realization in community colleges (Baily, Jaggers, & Jenkins, 2015; Karp, 2016). Baily, Jaggers, and Jenkins (2015) maintain that "to achieve significant institutional-level improvements in student success, reforms need to involve more thoroughgoing organizational change" (p. 11). For over fifty years, community colleges have created environments that provide for low-cost access to education but often do not provide the support that addresses the holistic needs of students – supports that address both the academic and emotional needs (Goldrick-Rab, 2010; Karp & Bork, 2014; Baily, Jaggers, & Jenkins, 2015). Over the past several decades, research has emerged that supports the need for student success initiatives; however, as this study pointed out, much of the

research is siloed, addressing academic and emotional supports separately and does not address student success from a holistic approach.

Historically, the responsibility of students' success has been placed on the students and viewed through the lens of retention and persistence. More recent literature discusses a concurrent responsibility on the part of the institution and the student (York, 2015). Suggesting that to measure student success accurately, the research indicates that educators take a multifaceted approach using a sociological, psychological, cultural, and organizational lens (Kuh et al., 2006, 2007, 2010; Duckworth & Yeager, 2015).

A high percentage of students who attend urban community colleges are persons of color, first-generation, and academically challenged. These students often face issues of poverty, language barriers, lack of family support, academic unpreparedness, homelessness, food insecurity, and trauma - all factors that create emotional distress, impeding academic success (Goldrick-Rab, 2010; Yue, Rico, Vang, & Giuffrida, 2018). These emotional impediments can lead to deficits in identity development, competence building, and relationship connections (Chickering & Reisser, 1993; Erikson, 1980), all of which can hinder students' academic success.

While SI is designed to promote academic persistence using a peer-to-peer approach, it is not intended to help address the aforementioned emotional impediments community college students often face. Student success not only rests on academic ability or intellect; it includes the student's emotional well-being, identity development, and capacity for coping with the stress of college (Duckworth & Yeager, 2015; Karp, 2016). The literature regarding SI focuses exclusively on improved academic performance, typically measured by GPA attainment, persistence, and retention, failing to address

holistic support for students, and does not consider how SI recipients experience identity, competence, and relationship building. The lack of holistically supportive integration into supplemental instruction that emphasizes both the academic and emotional needs of a student is problematic and contributes to the siloing of student supports. To improve the siloed supports, we needed to learn what student success and support means to students and how they experience it. By exploring SI, we can use this knowledge to drive holistic, supportive services and uncover how to address emotional impediments for developmental education students.

Purpose of the Study

Using a constructivist grounded theory methodology (Charmaz, 2006), I intended to explore supplemental instruction beyond its academic purpose, examining how developmental education students make meaning of their experience participating in SI. While SI is intended to address academic persistence (Arendale, 1994; Martin & Arendale, 1990; UMKC, 2020), this study focused on how developmental education students experience identity and competence through SI. Additionally, using SI as a platform, I proposed an examination of how developmental education students make meaning of their connections and relationships.

With the intent of allowing the data collected to generate theory (Charmaz, 2006), the scope of this study was limited to students who place below college-level in English or English Language Proficiency, and who were currently enrolled in at least one college-level course with supplemental instruction, or who met these criteria in the most recent past semester.

To address identity development, competence, and relationship building, I drew from Chickering's theory of identity development, solely to acquire a baseline for how college students grapple with their identity (Chickering, 1969). Fundamentally, the theory asserts that identity is how students cope with the stressors and issues they face during their years in college. The theory outlines identity development through seven vectors, what Chickering and Reisser (1993) discuss as "conceptional lenses" for higher education practitioners as a way "to view their students, their courses, and their programs more clearly and to use them as beacons for change" (p. 44). Additionally, since I used a group model to explore how students make meaning of their SI experiences, I discussed Yalom's theory of group interaction. Yalom's theory served only to understand how the structure of group interaction allows for universality (Yalom, 2005) and group cohesion. Neither theoretical lens was intended to be a platform for my research but helped to examine SI beyond its intended purpose.

Research Questions

Despite the overwhelming literature that discusses supplemental instruction's efficacy with academic persistence, there was limited research examining how SI recipients make meaning of their experiences, particularly in relation to identity, competence, and relationship building. I posited the following research questions:

1. How do developmental education students make meaning of their experience in supplemental instruction?
    a. How do developmental education students experience identity, competence, and relationship building through supplemental instruction?

b. What role does supplemental instruction play in how developmental education students' make meaning of their identity, competence, and relationship building?

2. What theory (theories) generates from exploring how supplemental instruction supports developmental education students' emotional needs?

Delimitations

Creswell (2007) discusses the challenges of grounded theory and asserts that the researcher "needs to set aside, as much as possible, theoretical ideas or notions so that the analytic, substantive theory can emerge" (p.67-8). Using a grounded theory method allowed the data to drive the theoretical construct of this study (Corbin & Strauss, 2015), and the study did not rely on theory preceding the research. The theories used in this study acted as anchors to situate the research process (Charmaz, 2006).

There is substantial research available documenting the efficacy of supplemental instruction. Much of the research (Blanc et al., 1983; Martin & Arendale, 1990; Arendale, 1994; McCarthy, Smits, Cosser, 1997; Maxwell, 1998; Bowles et al., 2008; Ning & Downing, 2010; Goomas, 2014; Skoglund, Wall & Kiene, 2018; UMKC, 2020), considers SI's success in fostering academic persistence for students enrolled in courses with high failure rates. Furthermore, the research supports and addresses the positive impact pertaining to identity and relationship building SI has for SI leaders (Goomas, 2014; Zaritsky & Toce, 2006). However, there was, and remains, a significant gap in the literature that addresses how SI recipients make meaning of their experience.

This study explored how developmental education students make meaning of their experiences in SI. Because these students were integrated into a college-level course,

college-level students were also enrolled in the program offering SI. However, the study only examined students with placement at the developmental level and found that college-level students did not typically participate in the SI program. Additionally, this study limited interviewing, and observations to developmental education students and English Language Learners enrolled in Teacher Education and Early Education college-level courses that hosted SI. Interviews and observations were conducted through courses offered on the college's main campus, primarily using remote technology (Zoom).

The research was conducted at an inner-city New Jersey community college whose enrollment includes 80% developmental education students. While the study was not intended to address race or culture, the institution primarily serves students of color (54% Latinx and 12% Black or African American) who reside in low-income, low socioeconomic areas, and who often experience environmental stressors that create academic challenges. Therefore, my research addressed this specific population but focused on the environmental issues that may impede identity development, competence, and relationship building and did not specifically address race or culture.

Significance of the Study

Because of the gaps in the literature, this study has considerable influences on policy, practice, and research (Maxwell, 2012). Considering the implications for policy, practice, and research, Maxwell (2012) suggests the research goals help strengthen the approach and emphasize the participants' experiences. Therefore, knowing how SI benefits students beyond what it is currently designed to offer helped me understand how students see themselves, form connections, and build relationships. Exploring holistic support integrated into SI became essential in learning the ways to eliminate the siloing

of student services and addressing the academic and emotional needs of a student simultaneously. Guided by my interests in holistic supports for student success, I used a grounded theory approach (Charmaz, 2006) to discuss the construct of supplemental instruction as holistic support for student success and worked to discover how students make meaning of their experiences.

Addressing policy, practice, and research and tying it to current practices at the above-mentioned institution provided reasoning for my research (Maxwell, 2012). This research intended to directly benefit the institution in the study and possibly other institutions with similar student populations and programs. Learning from the data, best practices were determined, allowing faculty and administration to view student support services across multiple perspectives.

Terminology

The following is a list of defined terms used throughout this study.

Developmental Education is defined as a process of preparative coursework for students who are underprepared to function academically at college-level and is designed to provide students with an increased skill level and understanding for basic subjects such as reading, writing, mathematics, and language proficiency (Baily, Jaggers, & Jenkins, 2015; Valentine, Konstantopoulos, & Goldrick-Rab, 2017).

Developmental Education Student refers to a student who has placed below college-level proficiency, typically determined by an aptitude exam.

English Language Learner refers to a student whose language proficiency is below college-level, typically determined by an aptitude exam, and will be categorized as developmental education.

Emotional Impediments refers to personal issues related to issues of poverty, financial and language barriers, lack of family support, academic unpreparedness, homelessness, food insecurity, and trauma.

Persistence refers to educational achievement towards the desired degree or credential (Kuh et al., 2006).

Holistic approach is designed to be inclusive and aims to address students' emotional, social, ethical, and academic needs (Bass et al., 2020; Baxter Magolda, 2009; Sigillo, 2018).

Holistic Education denotes a commitment to students, is centered around the idea that students are afforded the opportunity to discover their identity, make meaning of their experience, and find purpose through the relationships built and the connections made to the community (Bass et al., 2020).

Student Engagement is defined as the time, and energy students dedicate to a specific focus or activity that generates positive retention, academic success, and persistence through interactions and connections with faculty and other students, and the strategies institutions use to encourage students to participate (Kuh et al., 2006, 2007; Wolf-Wendel, Ward, & Kinzie, 2009; Kuh et al., 2010).

Student Success is defined by the effort students put into their academic experience, including both academic studies and extracurricular opportunities (Kuh et al., 2006, 2007; Kuh et al., 2010).

Supplemental Instruction refers to a non-remedial methodology and supportive learning strategy designed to assist students with the tools needed to achieve academic success and combines a "what to learn" with a "how to learn" approach (UMKC, 2020).

Supplemental Instruction Leaders are students who have earned at least a B+ or better in the targeted courses who facility SI study sessions, attend class lectures, and coach students on how to effectively study for the course. SI leaders participate in training sessions and continual supervision from the SI leadership team and faculty (UMKC, 2020).

Chapter 2

Literature Review

The context for this study was rooted in student development using the student success teaching and learning platform, Supplemental Instruction (SI). SI has been studied since the early 1970's when the University of Missouri at Kansas City (UMKC) launched its first SI program. Since then, UMKC discovered that SI is an effective student success indicator for retention and academic persistence (Goomas, 2014; McCarthy, Smuts, Cosser, 1997; Martin & Arendale, 1990; Maxwell, 1998; Skoglund, Wall & Kiene, 2018; UMKC, 2020). This chapter underscored the efficacy of SI as an academic component for student success and discussed the gap in the literature that addresses SI as a holistic support service. The research on SI is focused on academic persistence as it pertains to grade attainment and course pass rates (Arendale, 1994; Blanc et al., 1983; Goomas, 2014; McCarthy, Smits, Cosser, 1997; Martin & Arendale, 1990; Maxwell, 1998; Bowles et al., 2008; Ning & Downing, 2010; Skoglund, Wall & Kiene, 2018), but fails to address SI as a holistic support service that can strengthen participants' emotional needs. Additionally, this chapter pointed out the gap in research that addresses how SI recipients make meaning of their experiences beyond its intended practice. Using a grounded theory constructivist approach (Charmaz, 2006), I utilized my combined experience as a social worker and an educator to explore the role of group cohesion and holistic supports in SI and any possible benefits to support the emotional needs of developmental education students.

According to the University of Missouri-Kansas City (2020), SI is an academic peer-assisted group study program designed to improve overall retention rates. Initially,

SI was developed to provide students enrolled in historically difficult courses with informal group review sessions to learn how to integrate course content, discuss course material, and develop organizational tools for improved study skills (Arendale, 1994; McCarthy, Smuts, Cosser, 1997; Martin & Arendale, 1990). SI is a resource offered by the institution and is two-fold. It provides enhanced learning and leadership opportunities for the supplemental instruction leader, but it also provides the recipients with additional learning resources (Kuh et al., 2010; Martin & Arendale, 1990; UMKC, 2020). At its inception, SI was conceptualized as an academic enrichment learning community, comprised of small student groups who met voluntarily led by a trained peer. Initially designed for four-year urban institutions to serve non-traditional students who did not meet the university's academic standards, community colleges implemented an adaptation of supplemental instruction to lessen the academic risk for high-failure-rate courses (Arendale, 1994; UMKC, 2020). The intention was to minimize, with an attempt to eliminate the stigma associated with remediation (Arendale, 1994; Maxwell, 1998).

Academically challenged students, especially community college students who place below college level, often face more than just academic issues. These students are often plagued with emotional impediments that hinder success. Coupling the emotional strife of environmental stressors with the emotional discord of facing multiple semesters at the developmental level, community college students are at a higher risk for failure (Maxwell, 1998). Among the students enrolled in remedial courses, only about 30% actually attend the remedial course (Complete College America, 2011). Using SI has proved to be effective in helping students who place in developmental education succeed academically in college-level courses (Bowles, McCoy, & Bates, 2008; McCarthy,

Smuts, & Cosser, 1997; Zaritsky & Toce, 2006). However, by measuring students' success strictly through persistence and retention, we have been using a siloed approach.

Student engagement is often measured by how much time and energy students dedicate to their academic experience along with the connections they make that foster persistence and retention (Kuh et al., 2006, 2007; Kuh et al., 2010; Wolf-Wendel, Ward, & Kinzie, 2009;). Kuh et al. (2006, 2007) assert that student engagement is essential for making learning possible and is a predictor for students' academic success. Without a doubt, students who intentionally get involved have a better chance of succeeding (Astin, 1999; Hart, 2007; Ethington & Horn, 2007), and students who actively participate in the college experience become invested in the institution, which often leads to more meaningful experiences (Ashwin, 2003; Roberts & McNeese, 2010). Identity and sense-of-self play a significant role in student success (Karp & Bork, 2014). Karp and Bork (2014) posit that academic skill level cannot be the only measure for student success and suggest that to create a holistic experience for community college students, we must go beyond academic skill level and pay close attention to behavior.

Faculty and student success professionals understand that the objective for community college students is retention and completion, but student persistence must lead to completion with purpose. Providing students with a purpose helps them look beyond the classroom toward the learning experience, which ultimately allows for a more meaningful engagement (Chickering & Reisser, 1993; Roberts & McNeese, 2010). However, little to no literature on SI discusses the ancillary effects of emotional well-being for SI participants (e.g., identity, competence, relationship building) at community college.

For the purpose of this study, SI, specifically for urban community college students enrolled at the developmental level, was the vehicle assessed for student development. I situated Chickering's Identity Theory and Seven Vectors as well as Yalom's therapeutic factors for group interaction as a launchpad for the study of supplemental instruction as a holistic approach to student success (Chickering, 1969; Chickering & Reisser, 1993; Yalom, 2005). This study explored how supplemental instruction meets developmental education students' emotional needs and what role SI played in addressing identity, competence, and relationship building. Finally, the study examined what theory emerged from exploring how SI, supports developmental education students' emotional needs (Chickering, 1969; Chickering & Reisser, 1993; Erikson, 1980; Yalom, 2005).

Developmental Education Students at Community College

Community colleges are institutions that provide the community with access to an affordable college education (Fong et al., 2017; Goldrick-Rab, 2010). However, students who enroll in community college are often required to take basic skills tests. These assessments measure students' proficiency in math, reading, writing, and language literacy skills, leading over 60% of applicants to be placed in developmental education (Bailey & Cho, 2009; Snyder, de Brey, & Dillow, 2016). Developmental education in community colleges is a common practice and is defined as a process of preparative coursework for students who are underprepared to function academically at the college-level (Bailey, Jaggers, & Jenkins, 2015; Valentine, Konstantopoulos, & Goldrick-Rab, 2017). Designed to provide students with an increased skill level and understanding for basic subjects such as reading, writing, mathematics, and language proficiency, Bailey, Jaggers, and Jenkins (2015) and Valentine, Konstantopoulos, and Goldrick-Rab (2017)

discuss how developmental education has become an increasing norm for high school students entering community college.

While students are typically asked to take a basic skills placement test to determine their academic level, placement at the developmental level for enrolling students does not always indicate accurate placement. Additionally, developmental courses do not always denote ample preparation for college-level coursework (Valentine, Konstantopoulos, & Goldrick-Rab, 2017). According to Achieving the Dream (2018) and Bailey, Jeong, and Cho (2010), more than 50% of students placed in a developmental education sequence do not persist in college-level coursework and often drop out entirely. Thus, suggesting that remedial coursework is a deterrent to engagement and completion.

While academic readiness is a significant gauge of student success, Achieving the Dream (2018) proposes that community colleges face considerable battles in aligning their efforts with efficient accountability measures for academic readiness. To address this point, community colleges are taking into consideration areas that influence their student population for academic preparedness (Kuh et al., 2010; Goldrick-Rab, 2010; Bailey, Jaggars & Jenkins, 2015). These areas include a multidimensional holistic view of student success addressing a student's emotional well-being, identity development, and the ability to manage academic pressure (Duckworth & Yeager, 2015; Karp, 2016). Yet, there is minimal research on how developmental education students experience identity, competence, and relationship building through remedial education supports.

Student Success at Community Colleges

Student Success and Access

At their inception, the intention for community colleges was to facilitate the enrichment and quality of education in the community (Fong et al., 2017). Community

colleges were designed as open-access institutions to "represent an inclusive culture of learning and democratization of education" (Fong et al., 2017, p. 389), specifically for the underserved population. By addressing the need to serve a community population that is typically underserved and underprepared, community colleges are the bridge to promoting access for educational attainment (Goldrick-Rab, 2010; Fong et al., 2017). Goldrick-Rab (2010) defines community college open-access as nonselective institutions where students register with a myriad of goals, aspirations, and ideals for their experience. While access to education has been the intent of community college, success strategies have been increasingly studied to combat the overwhelming challenges of completion (Karp, 2016; Kuh et al., 2010; McComb & Lyddon, 2016; Sigillo, 2018).

Defining Student Success

Student success at community colleges has long been defined by completion rates (Goldrick-Rab, 2010; Kuh et al., 2010) and is often characterized by persistence and educational achievement towards the desired degree or credential (Kuh et al., 2006). Realizing that a singular approach to student success does not lead to persistence or completion, community colleges are now addressing the importance of becoming student-centered and taking an approach that directly addresses students' emotional needs and psychological qualities (Duckworth & Yeager, 2015).

In 2018, EdSurge Higher Ed identified that there is little to no emphasis placed on emotional, psychological, or financial benchmarks when measuring student success (Sigillo, 2018). Chickering (1969) contends that identity development occurs when students are exposed to activities that support self-discovery. However, with siloed support services, students are limited in making connections that help them to discover their level of social competence (Chickering & Reisser, 1993). Students are often

unaware of their needs to succeed academically, or more importantly, are facing overwhelming environmental issues that can inhibit and obstruct academic success, despite the want for an education (Duckworth & Yeager, 2015). Therefore, institutions that provide holistic success initiatives, as a norm, can profoundly affect how students discover and make meaning of their experiences. Hence, support that fosters student success ought to be comprehensive and multidimensional.

McComb and Lyddon (2016) assert, "There is a growing need for administration, faculty, and staff to understand to what extent and under what conditions interventions add value and are appropriate for the college" (p. 83). EdSurge Higher Ed discusses student success by initiative type, that student success cannot be measured by a singular effort but instead a fusion of solutions, "a synthesis of practices, technology, and data" (Sigillo, 2018, p. 9). Student success at community colleges involves a focus on reshaping the college experience to eliminate the silos of programs (Bailey, Jaggers, & Jenkins, 2015). Karp (2016) integrates Bailey, Jaggers, and Jenkins (2015) notion and argues that student success requires "intensive, intrusive, and holistic supports" (p. 40). An institution that integrates a developmental philosophy to address the student holistically imparts the necessary skills and pertinent knowledge to strengthen students' confidence and motivation (Chickering & Reisser, 1993). Fostering creativity generates the social responsibility and self-directed learning (Chickering & Reisser, 1993) needed to strengthen these traits. Therefore, creating sustainable interventions that require strategic support and purposefully connecting students with what they need and when they need it provides multidimensional support to assist with developing students' identity (Karp, 2016). This thinking moves institutions away from the siloed services that

focus only on measuring student success by retention and completion rates and drives the institutional thinking towards creating holistic supports for student success.

Responsibility for Engagement and Learning Opportunities

Student engagement as a means of student success is often defined by the time and effort students contribute to their studies and campus activities and how the institution allocates resources for students to participate in learning opportunities, both in and out of the classroom (Kuh et al., 2010; AACC, 2017). Learning in the classroom is vital for academic preparedness but learning outside of the classroom is key for students to gain the necessary skills for completion and ascension into the workforce, requiring an integrated approach to learning (Ethington & Horn, 2007; Lockeman & Pelco, 2013).

In 2010, the Center for Community College Student Engagement (CCCSE) conducted a study to assess student success as it relates to student engagement and persistence towards a credential. The study examined the relationship between engagement and easily verifiable measures, such as course completion, GPA, and graduation (CCCSE, 2010). Results of the study exposed the importance of participation in co-curricular activities on campus. Students who actively engaged in learning, both in and outside the classroom, are less likely to drop out of college and more likely to persist from semester to semester. This same group of students is more likely to finish their degree and move on to the workforce or transfer to a four-year university (AACC, 2017). The CCCSE survey did not address institutional responsibility; however, these results point to a need for institutions to provide the support that addresses learning outside of the classroom.

Kuh et al. (2006, 2007), Kuh et al. (2010), and subsequently Duckworth and Yeager (2015) assert that student success is measured through sociological, psychological, cultural, and organizational lenses; that student success comes from a myriad of interactions and settings (e.g., familial, cultural, social, political, educational) and is not solely the responsibility of the student or the institution. Conversely, York (2015) discusses that the institution is responsible for providing opportunities for student participation in and out of the classroom that encourages success. York (2015) asserts that the institution has a responsibility to ensure students are aware of all types of opportunities designed to promote success.

Purposeful Engagement

While many institutions have enacted programs to promote student success, there is still a strong emphasis on process and policy, forsaking purpose (Chickering & Reisser, 1993; Goldrick-Rab, 2010; McComb & Lyddon, 2016; Roberts & McNeese, 2010; York, 2015). To engage purpose, Goldrick-Rab (2010) suggests, "One way to stimulate a shift in reform emphasis is to reorient the measurement of student success to account for structural and institutional constraints" (p. 457). For example, the National Association of Colleges and Employers (NACE) (2018) measures student success by preparation from both the knowledge base and competencies for transfer and assimilation into the workplace. Placing value on student success beyond completion and persistence rates and addressing transfer and workforce readiness allows community college administrators to implement purposeful student engagement strategies that holistically address student success. In doing so, community college administrators can empower both staff and students to shift away from siloed learning and move towards a more consumer-centered

approach. Recognizing students as consumers, institutions can evaluate policy and integrate innovative practices into existing programs, ultimately promoting the purpose of persistence and retention (Bailey, Jaggers, & Jenkins, 2015).

While York (2015) contends that the institution is responsible, Kuh et al. (2010) assert that what the institution does to promote and cultivate success influences how students take advantage of the opportunities. In researching high-impact practices for student learning and engagement, Kuh et al. (2010) identified that academic challenge, learning with peers, experiences with faculty, and campus environment were the key indicators for student success. These indicators were organized into three vital components, "(1) what students do, the time and energy devoted to educationally purposeful activities; (2) what institutions do, using effective educational practices to induce students to do the right things; and (3) educationally effective institutions channel student energy toward the right activities" (Kuh et al., 2010).

High achieving students, those who are intrinsically motivated, typically seek out the academically enhanced programs promoted by the institution (e.g., honors programs, leadership development programs, and research projects), supporting the first prong of how Kuh et al. (2010) define student success and engagement. However, for every student who engages in these academically charged co-curricular activities, there is a multitude of students who do not make meaningful connections on campus or take advantage of the opportunities presented (Ashwin, 2003; Bailey, Jaggers, & Jenkins, 2015; Kuh et al., 2010).

Student engagement is a partnership between the student and the institution, and research supports that high levels of student engagement are imperative for college

success (Kuh et al., 2010; Wolf-Wendel, Ward, & Kinzie, 2009). However, for an institution to foster engagement, the campus environment should be reflective of student participation and work to develop student competencies. To create purposeful engagement, faculty and administration are crucial to the process of developing programming that supports students' needs, not just academically but also emotionally (Kuh et al., 2010). Students do not always come to college with the skills necessary to know how to create an environment that promotes engagement and success both in and out of the classroom (Webber, Krylow, & Zhang, 2013). Therefore, creating a student-centered environment with holistic support services offers students the platform to make meaning of their experiences.

Student Engagement and Social Relationships

Community college students often deal with a myriad of social and emotional challenges that create barriers to engaging on campus and building the relationships that promote success (Karp, 2016; Webber, Krylow, & Zhang, 2013). Karp (2016) asserts that the day-to-day issues that community college students face impede their focus and discuss that well-being is connected to the peer-to-peer social relationships built through engagement.

Well-Being

To address meaningful connections, Karp (2016) discussed the importance of social relationships, that forming relationships nurtures social integration, builds a sense of comfort, and encourages students' well-being. When discussing holistic support services, students' well-being is an area that must be addressed as an indicator of academic success and student engagement (Sigillo, 2018). Students who focus on their

well-being are typically more resilient and adaptable, allowing them to become engaged in student and academic activities (ATD, 2018). This study explored supplemental instruction as a group activity that addresses the importance of peer-to-peer relationship building, specifically identifying how SI played a role in how developmental education students make meaning of their experiences.

Peer Mentoring and Peer-to-Peer Interaction

Peer mentoring in higher education is an example of a peer-to-peer program that offers support to improve overall academic performance and can be instrumental in creating relationships between students (Collier, 2017; Plaskett et al.,2018). Typically, the relationship is between one student who is more skilled or experienced matched with a student(s) who is in need of guidance or assistance in the college experience or knowledge in a particular area (Collier, 2017). Peer mentoring programs in higher education have demonstrated a positive impact on conventional markers of college success, specifically GPA, credits earned, and retention (Collier, 2017). However, Collier (2017) argues that student success in higher education "is not simply a matter of students demonstrating their academic abilities" (p. 12). The transition to college places students in new roles, ones that challenge identity. Students are placed in roles that require efforts to understand new expectations on academic skills and social relationships.

Plaskett et al. (2018) studied the efficacy of peer mentoring with first-generation low-income college students using a frame centered on social learning theory. In peer mentoring, social learning theory provides a role model approach – pairing mentors with students who are relatable and can draw from similar experiences. This approach builds a sense of self-efficacy and achievement while reducing the negative stigma (Plaskett et al., 2018). Plaskett et al. (2018) found that peer mentoring fostered strong relationships

between mentor and mentee that shared empathy, trust, respect, and closeness. Collier (2017) asserts that role modeling is a key element in mentoring relationships and that mentoring creates trustworthiness and credibility. Concluding that role modeling promotes success through "sharing a common perspective about how to enact the college student role seems to be associated with student success within higher education" (Collier, 2017, p. 15).

While SI is designed to foster academic support, this study identified the question as to whether this type of peer-to-peer involvement could provide similar connections and foster similar relationships as peer mentoring. The study also questioned how SI could mirror peer mentoring and help developmental education students make meaning of their identity, build competence, and foster relationship connections.

Cerna, Platania, and Fong (2012) explored teaching and learning approaches related to peer support with the idea of assisting larger groups of students in completing development course sequences and persisting in college-level course work. The idea was to recruit and train students who successfully completed the developmental course work, dubbing these students "peer leaders." They studied two community colleges in Massachusetts through the Achieving the Dream initiative to create data-informed classroom and campus approaches to developmental courses. Using a case-study strategy of inquiry, Cerna, Platania, and Fong (2012) looked at SI at one college and peer mentoring at another. The peer leaders' responsibilities were similar at each college, and the goal for both programs was to involve the peer leaders in helping other students "succeed academically and acclimate socially" (p. 3). The peer leaders using the SI model were tasked mainly in the classroom, while the peer leaders using the peer

mentoring approach role were geared toward support outside of the classroom. Both groups of peer leaders were charged with facilitating group sessions and assigned to specific classes.

Results of the case studies were based on data collected from field visits, program reports, interviews, and focus groups over a two-year period (Cerna, Platania, & Fong, 2012). The results indicated that students in peer-assisted courses benefitted from the peer leaders' guidance and support, regardless of which program, mainly because the support came from fellow students (Cerna, Platania, & Fong, 2012). Each program provided innovative ways to improve student learning and engagement in community college classrooms and demonstrated that peer leaders could play an integral part in assisting other students (Cerna, Platania, & Fong, 2012). Results did indicate that peer-to-peer interaction reinforced course content and aided in persistence for developmental education students. However, the two programs were studied separately and did not address identity-building or supporting students' emotional needs beyond academic interventions.

Supplemental Instruction

The University of Missouri-Kansas City (UMKC) defines supplemental instruction as a non-remedial methodology and supportive learning strategy designed to assist students with the tools needed to achieve academic success. The premise of SI combines a "what to learn" with a "how to learn" approach (UMKC, 2020). Supplemental instruction involves group study sessions that happen adjunctively to the course a student is enrolled in, are regularly scheduled, voluntary, and focused according to students' academic needs. These group sessions are typically led by a trained peer-leader who implements collaborative activities that facilitate peer-to-peer interaction

(Arendale, 1994; Martin & Arendale, 1990; UMKC, 2020). The purpose of SI is "to increase retention within targeted historically difficult courses, to improve student grades in targeted historically difficult courses, and to increase the graduation rates of students" (UMKC, 2020).

Often, SI is thought of as a form of tutoring but is not. SI is meant to enhance the student's opportunity to hear the lecture again and aid students in answering the problems posed in the class (Martin & Arendale, 1990; Arendale, 1994; UMKC, 2020). While closely related to tutoring, SI is designed to augment the deficits in students' learning skills (e.g., critical thinking and study strategies and skills) and provide students with the tools and skills needed to conceptualize the material delivered in the course (Bailey, Jaggars & Jenkins, 2015; UMKC, 2020).

SI is typically identified in student success models as a co-curricular academic program adjunctive to the traditional pedagogical approach (Bailey, Jaggars & Jenkins, 2015; Kuh et al., 2010; UMKC, 2020). However, teaching and learning are not synonymous; Kuh et al. (2010) assert that teaching does not inevitably lead to learning. An emphasis on learning has shifted the way teaching is implemented. This shift has led many institutions to implement co-curricular programs such as SI. The pedagogy associated with SI is formulated through teaching and learning and provides academically purposeful activities that augment the material being delivered in the classroom (Arendale, 1994; Bailey, Jaggars & Jenkins, 2015).

A Holistic Approach to Supplemental Instruction

A holistic education, one that denotes a commitment to students, is centered around the idea that students are afforded the opportunity to discover their identity, make meaning of their experience, and find purpose through the relationships built and the

connections made to the community (Bass et al., 2020). The holistic approach is designed to be inclusive and aims to address students' emotional, social, ethical, and academic needs. Education comprised of holistic supports allows students to tap the intrinsic motivation that brought them to college. Focusing on persistence and retention by way of academic curriculum does not invite a holistic environment. Learning inside and outside the classroom happens concurrently and infuses critical-thinking skills to decipher real-world problems (Bass et al., 2020; Baxter Magolda, 2009; Sigillo, 2018).

Taking a holistic approach to student success requires that institutions offer a broad range of student support services and programs. Extracurricular and co-curricular activities are essential in how institutions deliver these services. Providing student support services that are intentionally student-centered allows for a more effective way to support students through a holistic approach (Achieving the Dream (ATD), 2018; Chickering & Reisser, 1999; Sigillo, 2018). A holistic, student-centered approach requires deliberate development and integration of activities that address both academic and personal supports (ATD, 2018; Baxter Magolda, 2009). By subscribing to a holistic approach to learning, an institution moves away from offering a variety of different services for specified student populations and moves toward services that are inclusive and equitable for every student (Achieving the Dream (ATD), 2018; Baxter Magolda, 2009; Sigillo, 2018). Being student-centered, focusing on who the students are, and building relationships with students are fundamental in developing a holistic educational experience that supports and provides both academic and emotional growth (Bass et al., 2020).

SI programs are typically measured by the grades of SI participants with the grades of nonparticipants. Trained, high-achieving students facilitate these programs – students who were academically successful in the course (i.e., receiving a B+ or better) and who demonstrate strong interpersonal skills (Blanc et al.,1983; Martin & Arendale, 1990; UMKC, 2020). Research out of the International Center for Supplemental Instruction at the University of Missouri at Kansas City (2020) asserts that students who participate in SI when compared to students who do not participate, on average, earn higher final course grades, succeed at a higher rate, and persist at higher rates. Yet, there are no indicators that the peer-to-peer interaction of SI addresses the student holistically. Research conducted by Blanc et al. (1983), McCarthy, Smuts, and Cosser (1997), and subsequently by Bowles, McCoy, and Bates (2008), Maxwell (1998), Ning and Downing (2010), Yue et al. (2018), and Zaritsky, and Toce (2006), discusses that supplemental instruction, while similar in most institutions, lacks research into how SI recipients make meaning of their experience in SI.

SI can serve as a holistic activity that addresses academic, personal, and emotional support for the developmental education student; however, there is little to no research to support a holistic SI design. Supplemental instruction has been designed to address students' academic needs in high-risk courses and has been adopted by many institutions across a wide variety of disciplines (Skoglund, Wall & Kiene, 2018). There is a lack of information on how SI addresses students' needs beyond academic development. SI has been studied over the past thirty years, and its success for students enrolled in high-risk courses is linked solely to persistence and retention (Goomas, 2014; McCarthy, Smits, Cosser, 1997; Martin & Arendale, 1990; Maxwell, 1998; Skoglund,

Wall & Kiene, 2018, UMKC, 2020) and fails to address how SI recipients make meaning of their experiences.

Ashwin (2003) argued that while SI improved students' study strategies and provided students with a better understanding of the course assessments, that it neglects to help students make meaning of their achievements. The research (Blanc et al., 1983; Bowles et al., 2008; McCarthy et al., 1997; Maxwell, 1998; Ning & Downing, 2010; Yue et al., 2018; Zaritsky & Toce, 2006) on SI does not look beyond academic gain and fails to identify how the support of SI shapes the students' emotional needs (e. g., identity, competence) built from the relationships attained through the group work in SI. Therefore, to understand how students make meaning of their experiences in SI, this study explored SI as a holistic support service and multidimensional practice from a sociological, psychological, cultural, and organizational lens to identify what students need and how they made meaning of their emotional needs (Kuh et al., 2006, 2007, 2010; Duckworth & Yeager, 2015).

McGuire, Stone, and Jacobs (2006) assert that SI infuses learning theories that address behaviorism, cognitivism, and constructivism. These fundamental learning theories help to call attention to SI as a student-centered learning activity and propose that SI models teach learners how to respond appropriately to the information being delivered. Baxter Magolda (2009) argues that "constructing a holistic theoretical perspective requires focusing on intersections rather than constructs" (p. 621). Baxter Magolda (2009) discusses that the intersection of behavior and cognition renovates learning – that the focus shifts from the polarities of behavior and cognition to the context of how behavior and cognition are interconnected in learning.

Holistically enhanced educational services can allow for the development of intellectual, mental, physical, emotional, and social abilities that a college student needs to meet the challenges of learning (Achieving the Dream (ATD), 2018; Bass et al., 2020; Sigillo, 2018). Holistic development is an intentional and inclusive approach to learning (Achieving the Dream (ATD), 2018; Sigillo, 2018) and reinforces the idea that students need support beyond academic training. Traditional educational and learning systems focus on intellectual abilities and competencies. However, effective student support services integrate a holistic approach to address students' physical, intellectual, cognitive, and emotional skills, promote social skills, and address identity-building areas that promote competence and relationship building (Achieving the Dream, 2018; Chickering & Reisser, 1993).

In an assessment of SI effectiveness, McCarthy, Smuts, and Cosser (1997) contended that there are many variables to SI, including motivation to take the course, level of preparedness for the course, personality type, and abilities to adapt to college life. Using a case study approach, the study confirmed the effectiveness of SI – that students enrolled in SI courses perform significantly better academically than students not enrolled in SI courses (McCarthy, Smuts, & Cosser, 1997). These results are consistent regarding the effectiveness of SI; however, understanding the variables related to identity development, competence, and relationship building have often been overlooked.

Wolf-Wendel, Ward, and Kinzie (2009) and Kuh et al. (2010) integrate Astin's (1999) concepts of student involvement, acknowledging that in order for students to grow as learners, they must actively participate on campus to benefit from the college experience. Kuh et al. (2010) explain involvement theory in relation to student success

and assert that the amount of time a student spends engaged in activities and the level of effort a student puts into his/her/their studies leads to success. Echoing Baxter Magolda's (2009) claim regarding intersections, Hatch (2017) integrates Kuh et al. (2010) approach, discussing that "student engagement is conceptually a joint phenomenon existing at the intersection of individuals and institutions" (p. 6). Hatch (2017) posits that engagement does not stem solely from involvement, but that students' integrated experiences are formed from interactions with peers, faculty, advisors, and other college personnel concurrently in both specific and broad contexts. The combination of devotion and commitment to academics and the integration of involvement with peers and faculty create the intersection of engagement (Bass et al., 2020; Hatch, 2017; Kuh et al., 2010; Wolf-Wendel, Ward, & Kinzie, 2009). While this study did not focus on student-centered non-academic activities, supplemental instruction was considered a co-curricular activity, as it is not typically mandatory and is designed to promote peer-to-peer interaction.

SI Leaders

Supplemental instruction is led by current students who have mastered the course where SI is being offered. Students are trained as SI leaders to create a peer-to-peer learning experience. The training includes an introduction to SI and focuses on the tasks the responsibilities of SI Leaders but also their interactions with the faculty member teaching the course. The SI leaders is typically a paid position but funding is often a variable among institutions.

SI leaders are trained to work with students beyond the course content and are typically instructed not to repeat the content (Bailey, Jaggars & Jenkins, 2015; Zaritsky & Toce, 2006; UMKC, 2020). SI leaders are provided active learning training (Zaritsky & Toce, 2006) that focuses on the "principles and methodology of collaborative and

cooperative learning" (p. 25). To ensure the SI leader focusing on collaborative and cooperative learning, they are provided with tools to develop lesson plans and activities that correlate to the weekly course content. Typically, SI leaders are trained by administrative personnel. Faculty are often including in the SI leader training to establish the roles and responsibilities of each (UMKC, 2020).

Acting as a group facilitator, the SI leader conducts peer-to-peer group study sessions, which combine lecture notes and study guides from the course (UMKC, 2020). The SI leader is not a substitute for the professor nor a teaching assistant, but a guide who creates a collaborative environment where students can converse, examine, and deliberate the course material through a myriad of strategies (e.g., testing each other, sharing notes) (Zaritsky & Toce, 2006; Goomas, 2014). SI leaders are expected to attend all the classes for which they are providing SI, which helps the SI leader to develop the lesson plans. In addition to attending the course sessions, it is expected that SI leaders communicate with faculty on students' progress, concerns, or questions about the course content. In turn, faculty are expected to be available to assist the leader with content delivery, lesson plan development, and tactics for instruction (UMKC, 2020_.

With the intent of SI being "what to learn" and "how to learn it," SI leaders are trained to use group strategies to problem solve through discussion aimed at strengthening the course content for the participants (Arendale, 1994; Goomas, 2014; Martin & Arendale,1990; Zaritsky & Toce, 2006). However, SI leaders are not trained to address any social or emotional issues related to the participants learning experience, and the problem solving revolves solely around course content. From a holistic perspective, integrating training that supports emotional and social relationship building can foster

identity development—consequently leading to a more interconnected learning environment.

In addition to meeting with faculty regarding the logistics of SI development, SI leaders work closely with the faculty teaching the course attached to the SI and regularly receive mentoring. UMKC (2020) suggests that mentoring sessions between the SI leader and faculty member occur often (e.g., weekly, bi-weekly) and address ideas for content delivery but also leadership and communication strategies. Because of the nature and subject matter suggested in the mentoring process, the mentoring between the faculty member and the SI leader often leads to improved academic performance, enhanced communication and relationship-building skills, and increased self-confidence and self-esteem as peer-to-peer leaders (Stout & McDaniel, 2006). Receiving mentoring from faculty and SI staff, SI leaders become role models for the SI participants. Having a sense of confidence as a peer leader and in the content area, SI leaders are seen as role models students can aspire to (Stout & McDaniel, 2006).

Theoretical Context

The use of prior theory in a grounded theory study has been both disputed and misunderstood (Charmaz, 2006). Historically, grounded theorists have delayed engaging in prior literature until data analysis was complete as not to confound the emerging theory (Charmaz, 2006; Corbin & Strauss, 2015; Glasser & Strauss, 1999). However, using established literature as a foundation to support a researcher's ideas can help with situating the concepts being studied. I used Chickering's Theory of Identity Development and Yalom's Theory of Group Interaction to anchor my ideas and refine the existing SI concepts (Charmaz, 2006). These theories were not situated to inform hypotheses but to

sensitize concepts and provided a starting point for my research. Using this prior theory helped me explain, theorize, and organize the key ideas that emerged from my data and informed my conceptual reasoning and focus (Charmaz, 2006). The following address identity and group theory to assist in understanding how developmental education students make meaning of their experiences in SI and what role SI played in identity, competence, and relationship building.

Chickering's Theory of Identity Development

Chickering's Identity Development Theory (Chickering, 1969; Chickering & Reisser, 1993) proposes that college students move through seven vectors, each that describes a phase of the students' life as it pertains to their identity growth and motivation. The theory illustrates student development in college and how the student's identity is affected by emotion - socially, physically, and intellectually. Chickering (1969) and, more recently, Chickering and Reisser (1993) name the vectors as developing competence, managing emotions, moving through autonomy toward interdependence, developing mature interpersonal relationships, establishing identity, developing purpose, and developing integrity. Initially, Chickering theorized that students' identity development proceeds along seven vectors, asserting that students progressed through the vectors in some sequential fashion. Chickering (1969) correlated students' college experiences to how their psychosocial development evolved personally. Chickering's (1969) theory primarily studied traditional-aged, white students who attended small liberal arts colleges (Foubert et al., 2005; Reisser, 1995). Identifying this limitation, Chickering and Reisser (1993) integrated research from a myriad of theorists, influencing their own research, which allowed the redefining of the vectors. Their concern about how

the study of identity and how the impact of psychosocial theories constructed identity on the white majority led Chickering and Reisser (1993) to study alternate social identities taking race, ethnicity, gender, and sexual orientation into account (Baxter Magolda, 2009). The redefining provided a more comprehensive depiction of student development (Foubert et al., 2005; Reisser, 1995).

Pulling from the work of Erikson, Kohlberg, and Josselson, Chickering (1969) and Chickering and Reisser (1993) grounded the identity theory in autonomy and interdependence (Baxter Magolda, 2009). Students who are connected to the campus environment are more likely to become involved in active and collaborative learning, have broader opportunities to develop critical thinking skills, and are better at applying the concepts learned in the classroom in different settings (Kuh et al., 2010). Goomas (2014) cites Kuh, linking the increased academic performance from SI to student engagement, specifically to a student's desired outcome and what the institution does to generate students' motivation. The theory recognizes that identity is fluid and suggests that the path through the vectors is not linear, but it does ladder the vectors demonstrating how each vector supports the next. The theory supports a holistic concept of educating the student as a whole person.

Theoretical Underpinnings of Chickering's Theory of Identity Development

Over the past six decades, the study of student development has emphasized a need for continued investigation on college students' psychosocial development to address student success holistically. Pascarella and Terenzini (2005) assert that psychosocial theories perceive individual development as the "accomplishment of a series of developmental tasks" (p., 20). A student's developmental process varies based

on sociocultural and environmental challenges and is often influenced biologically, psychologically, or socio-culturally (Pascarella & Terenzini, 2005). While often presented through the sequence of life, individuals do not typically address these challenges linearly. Chickering (1969) studied the psychosocial development of college students drawing from psychosocial theories by such theorists as Erikson, Marcia, Cross, and Josselson, albeit each who looked at identity development in different populations, all viewed development as a series of tasks or stages (Chickering & Reisser, 1993; Pascarella & Terenzini, 2005).

Chickering and Reisser (1993) examine several theories to strengthen the basis for the seven vectors. The theoretical platform for the foundation of the vectors shapes identity ideals and looks at cognitive and psychosocial development through the life span. Additionally, Chickering (1969) and Chickering and Resisser (1993) use theories highlighting individual attributes that influence students' experiences. Similar to the concept of providing a student-centered holistic education, Chickering (1969) argues that identity development is centered around competence, the management of emotions, autonomy, and healthy relationships; that identity formation is a process and requires a level of self-discovery. The psychosocial theories, such as Erikson's identity theory, consider development through phases that address changes in a person's thinking, feeling, behaving, valuing, and relating to others and self (Erikson, 1980). The cognitive theories, such as Baxter Magolda's epistemological reflection model and Kegan's evolving self, refer to shifts in thinking and the changing schemas that shape a person's ideals, beliefs, and expectations of their environment.

To support the influence of students' experiences, Chickering and Reisser (1993) refer to typology and person-environment theories. Typology theories explain the differences in learning styles, personality types, temperaments, or socioeconomic backgrounds as the milieu for emotional and social growth. Person-environment theories emphasize how behavior manifests as a result of environmental influences (Chickering & Resisser, 1993). The framework for Chickering's Identity theory provides a multidimensional approach to identity development. The theory helps discover and ascertain how change happens for students through their experiences, supporting the idea that SI can benefit from a holistic approach and the need to explore how students make meaning of their experiences.

The Seven Vectors

Developing Competence

Competence is described as three-pronged– intellectual, physical and manual, and interpersonal (Chickering, 1969; Chickering, & Reisser, 1993). Intellectual competence is the ability to acquire knowledge specific to learning, critical thinking, and reasoning. Intellectual competence embroils the mastering of a subject matter in order to build the capacity to understand, evaluate, and integrate information through a higher order of thinking (Chickering, 1969; Chickering, & Reisser, 1993).

Chickering and Reisser (1993) propose that physical and manual competence involves athletic and artistic attainment. The physical component is rooted in strength, fitness, and self-discipline and suggests that the discipline developed through involvement in athletics provides the basis for adaptability. Being able to adapt to group goals and the changing structure of a game enhances the ability to think constructively.

Physical and manual competence is also related to wellness, specifically, emotional wellness. Athleticism, especially in adolescents, is a leading factor in building self-esteem (Chickering & Reisser, 1993). Equally as important in physical activities, this area of competence is a factor in how students manage and cope with the mentally and physically demanding issues related to crisis, trauma, and hardship (El Ansari & Stock, 2009), areas that urban community college students often face.

Interpersonal competence applies to soft skills, such as leadership development, written and oral communication, and team building (Chickering, 1969; Chickering & Reisser, 1993). Interpersonal competence also encompasses more complex capacities, specific to awareness of others' emotions and the ability to respond appropriately. The leadership aspect of interpersonal competence is essential when working in groups. This area of competence allows a person to align his/her/their goals with a group and build relationships with a group that allows for growth (Chickering & Reisser, 1993)

Motivation to Engage in Supplemental Instruction. To understand where a student's competence derives from, we need to look at motivation. Intrinsic motivation may be a component that brings a student to college. Still, there needs to be a certain amount of extrinsic motivation that a student should experience to keep his/her/their on track, engaged, and motivated, especially students who place at the developmental level or are high-risk for academic failure. Goomas (2014) explains the importance of building a student's motivation toward success using supplemental instruction as support. Students who elect to participate in SI may do so because they are concerned about passing the course. The motivation to participate in SI is typically related to academic achievement, in part because of the way SI is presented to the student.

Managing Emotions

Self-control is noted as the premise of managing emotions. Chickering and Reisser (1993) assert that students must first become aware of their feelings and emotions, learn ways to cope with their feelings, and make connections between attitudes and behavior. College students experience many feelings but are often plagued by anxiety, depression, fear, anger, guilt, and shame. Community college students, especially those who live in urban areas, are also often plagued by poverty, an overwhelming contributing factor to crisis, trauma, anxiety, and fear (Yue, Rico, Vang, & Giuffrida, 2018). Students should not look to eradicate their feelings but embrace how these feelings can catapult behavioral change (Chickering & Reisser, 1993). The students' development process advances when they use negative feelings (i.e., fear, shame, resentment) to build self-regulation and expression, bringing balance to the support of others (Chickering & Reisser, 1993).

Moving through Autonomy towards Interdependence

Being self-sufficient is a key factor in being responsible. Students who develop goals and take responsibility for meeting those goals typically demonstrate both emotional and instrumental independence (Chickering & Reisser, 1993). Many students who attend community college live in poverty and experience all the emotions associated with deprivation (Yue, Rico, Vang, & Giuffrida, 2018). To gain a sense of autonomy, students need to recognize that relationships are essential and help foster independence and self-sufficiency (Chickering & Reisser, 1993).

Chickering and Reisser (1993) acknowledge that autonomy is a critical component in developing independence and categorize independence as emotional and

instrumental. Emotional independence signifies freedom from the incessant desires for affection and the constant reinforcement of approval (Chickering & Reisser, 1993). Students who possess instrumental independence have strong problem-solving skills, have the capacity to coordinate and manage group activities, are self-directed, and are mobile (Chickering & Reisser, 1993). Emotional and instrumental independence contribute to relationship building and allow for reciprocity in relationships. Students are able to view school as an inclusive community and respect the autonomy of the people with whom they associate (Chickering & Reisser, 1993).

Developing Mature Interpersonal Relationships

Community college students are surrounded by a diverse group of individuals from various cultures who ascribe to different beliefs and values. Being exposed to diversity allows for building the capacity for tolerance and intimacy (Chickering, 1969; Chickering & Reisser, 1993). Tolerance is viewed prospectively as both intercultural and interpersonal (Chickering & Reisser, 1993). Operating from a frame of tolerance demonstrates the ability to respond positively to differences rather than generalize groups of people because of their differences. Chickering and Reisser (1993) argue that tolerance is essential for the development of relationships, that tolerance is rooted in awareness, and that awareness allows for objectivity and empathy for diversity.

Intimacy is a product of building constructive and healthy relationships. College students are known for engaging in narcissistic relationships. However, building relationships free from egotism and self-absorption requires an intellectually tolerant attitude (Chickering & Reisser, 1993). Moreover, the breadth of tolerance generates the ability to engage in healthy intimacy (Chickering & Reisser, 1993). Students who

positively connect to others are often exposed to role models who demonstrate acceptance and warmth and who are provided with the opportunity to observe how others work through struggles and challenges (Chickering & Reisser, 1993).

Establishing Identity

Identity is personal, but understanding and establishing identity often hinges on culture, race, ethnicity, gender, and sexual orientation. Chickering and Reisser (1993) assert that identity development involves seven areas "(1) comfort with body and appearance, (2) comfort with gender and sexual orientation, (3) sense of self in a social, historical, and cultural context, (4) clarification of self-concept through roles and life-style, (5) sense of self in response to feedback from valued others, (6) sense of self-acceptance and self-esteem, and (7) personal stability and integration" (p. 49).

Each of these elements affects the way a person sees him/her/themself. Erikson (1980) asserts that the first component of a healthy identity is basic trust. That identity is formed based on the level of trust or mistrust a person experiences, both consciously and unconsciously. Erikson (1980) discusses the importance of identity development and attributes student development to the environment. That environment determines a person's ability to form healthy coping skills. Students who attend urban community colleges are often disenfranchised, low-income, students of color, and from low socioeconomic status families who have spent most of their lives combating systemic oppression (Bernard, 2009; Mulvey, 2009). Chickering and Reisser (1993) cite Erikson and discuss how his stages of identity development on the life cycle suggest that ego strength is "determined from the sequence of challenges or crises that we gain from trust, initiative, industriousness, intimacy, etc." (p. 174). Family of origin and ethnic heritage

contribute to how a person sees him/her/themself and how others perceive him/her/them with respect to social norms. Students who face marginalization often struggle with building trusting relationships. However, engaging in social activities on campus promotes relationship building (Karp & Bork, 2014; Kuh et al., 2010).

Developing Purpose

Social interaction is the crux of how a person defines his/her/their purpose. Chickering and Reisser (1993) argue that developing purpose requires a person to have some sense of competence, ability to manage emotions, autonomy, have at least one strong, healthy relationship, and have gained a sense of identity. "Developing purpose entails an increasing ability to be intentional, to assess interests and options, to clarify goals, to make plans, and to persist despite obstacles" (Chickering & Reisser, 1993. p. 209).

Purpose comes from the ability to devise and formulate intentional strategies that help one to persist through the challenges that arise when attending college. When students develop purpose, their degree attainment becomes a significant goal. Students begin to realize the skills necessary to complete their degrees and ascend into the workforce (Duckworth & Yeager, 2015). The purpose develops the rationale and objective for career development, earning a living, building a family, etc. The motivation that drives purpose is derived from the inherent energy developed from competence and identity (Chickering & Reisser, 1993).

Developing Integrity

Chickering and Reisser (1993) discuss developing integrity in the context of purpose. They assert that for one to develop integrity, he/she/they must have purpose.

The purpose of developing integrity involves three consecutive, but intersecting stages - humanizing values, personalizing values, and developing congruence. Humanizing values shifts beliefs from literal to relative (Chickering & Reisser, 1993). At this stage, students intersect rules and purpose, deciphering between what they learned from their family of origin and what they are learning from their new relationships. Personalizing values transpires as students integrate their self-determination with the guidelines that make sense for their new environment (Chickering & Reisser, 1993). Chickering and Reisser (1993) relate personal values to the wardrobe that students assemble – the pieces of the wardrobe are parallel to their developed characteristics (i.e., empathy), their required effort, by the circumstances faced, and the people and groups with whom they have developed important relationships (Chickering & Reisser, 1993).

Chickering's Identity Development Theory and Community College Students

Community colleges offer educational access to students who typically do not have the social or emotional capital or who cannot afford to attend four-year institutions. Community college students are generally first-generation students who are accountable to their household or are non-traditional students responsible for providing for themselves and/or families of their own, all of which make engaging in the college experience problematic (Karp & Bork, 2014). These students frequently face obstacles, specifically social inequality, academic challenges, economic challenges, social and informational hurdles, and a deficit in motivation or commitment (AACC, 2017; Goldrick-Rab, 2010). Therefore, examining students' background, characteristics, life experiences, and language helps recognize how students experience the same environment differently (Chickering & Resisser, 1993) and how they make meaning of their experiences.

Yalom's Theory of Group Interaction

Students who are identified as developmental education students are placed in a category or group that can promote a feeling of rejection or exclusion. Hutchinson, Abrams, and Christian (2005) assert that the consequences of social exclusion for an individual or group perpetuate a multitude of adverse outcomes, including poor health and well-being, academic underachievement, antisocial and criminal behavior, and reduced access to housing, employment, and social justice. Providing a group that can combat a negative perception promotes inclusion and allows the participant to develop a sense of belonging. Yalom (2005) asserts that the success of a group depends on 12 factors: universality, altruism, instillation of hope, imparting information, corrective recapitulation of primary family experience, development of socializing techniques, imitative behavior, cohesiveness, existential factors, catharsis, interpersonal learning input and output, and self-understanding.

Working in a group promotes universality, a connection between people who experience similar issues (Yalom, 2005). By engaging in a group with people who understand each other's difficulties or struggles, a person is more apt to feel a part of something and attach to the potential of change (Yalom, 2005). Groups designed to address a specific problem and impart information or advice, in this case, academic placement, create social connections that can build an individual's self-esteem and begin to establish a positive identity (Paulus, Kenworthy, & Coskun, 2012). The instillation of hope is typically the first factor that arises when working towards building universality. When group members are provided with opportunities to connect with others who experience similar issues or experiences optimism for improvement is often experienced

(Yalom, 2005). As group members engage with each other and help each other to make connections, altruism occurs. Altruism facilitates group members in achieving improved self-confidence and gaining a sense of self-concepts as they engage with others in the group (Yalom, 2005). With family being the first group any person experiences, attending groups in any settings, but specifically in academic settings, aid in providing members with the opportunity to experience how they interact with others and offers self-exploration, and personal development as behavior is imitative (Yalom, 2005). The group interactions provide a sense of belonging and intimacy, which begins to create a cohesiveness to build friendships. The trust that forms often initiates existential factors that help group members to accept personal responsibility and promotes cathartic expression (Yalom, 2005). The release of their expressions has an impact of the learning process by the opportunity of group members giving and receiving feedback. The environment created by the group also fosters adaptability and insight that strengthens the group interactions (Yalom, 2005). The group process provides members with the opportunity for self-discovery and self-understanding. Members often gain insight into their process and motivation for accomplishment occurs (Yalom, 2005).

Supplemental instruction operates as a group process. Individuals with similar issues, in this case, academic placement below college-level, come together under the guidance of a professional. The professional would be defined as someone who holds the skills necessary to deliver the information or skills required for the attendees to make a change (Yalom, 2005). SI leaders are students who have the content knowledge and are trained to accentuate collaborative and active learning (Reittinger, Reittinger, & Palmer, 1996; Zaritsky & Toce, 2006).

Groups allow for shared motives and goals while creating opportunities for socialization. Yalom (2005) discusses how group work instills hope. Hope emerges in the group setting as members begin to acknowledge each other's victories (Yalom, 2005). Hope arises as the group goes through stages. Tuckman (1965) asserts there are five stages a group goes through – forming, storming, norming, and performing.

Similarly, Yalom (2005) argues stages form as orientation, conflict, harmony, and maturity. Fear and anxiety may arise among individuals in the group, and there may be an unrealistic idea as to what will be happening in the group. Both Tuckman (1965) and Yalom (2005) discuss group dynamics in the form of stages, addressing how groups develop, allowing for individual identity development. SI leaders are trained to build a community by using group interaction designed to help students process the content of the information delivered in the class (Reittinger, Reittinger, & Palmer, 1996).

In the initial stage of group formation, or the forming stage (Tuckman, 1965; Yalom, 2005), group members assess their place in the group and begin to establish interpersonal relationships. The group begins to become familiar with the groups' purpose and structure. Once relationships begin to form, the group begins to experience conflict or storming (Tuckman, 1965; Yalom, 2005). Because the group has not yet established a sense of unity, members still see themselves as individuals. Group members may experience an identity crisis and struggle to conform to the forming relationships. The interaction may be siloed, creating a resistance to the formation of group identity (Yalom, 2005). The conflict and resistance of group formation impede universality; however, influences from the facilitator who uses the conflict to integrate relationship building propels the group into a norming stage (Tuckman, 1965; Yalom, 2005). The

norming stage is illustrating the emergence of group harmony – members begin to connect to each other and the facilitator. Sharing of opinions and ideas are openly conveyed, and members begin to accept each other (Yalom, 2005). Universality is established in the norming stage, and conflict turns to harmony (Yalom, 2005). Once universality has been normed, group members begin performing. This insinuates the final stage of group development. The performing stage exhibits a period of constructive cooperation and collaboration. Group members establish support for each other, and issues related to task completion are resolved (Tuckman, 1965; Yalom, 2005).

Using SI as a Group Activity to Build Identity

Skoglund, Wall, and Kiene (2018) discuss SI as a "powerful form of learning assistance" with a goal to improve grades and increase retention and graduation rates. Supplemental instruction provides effectual learning experiences for students through collaborative learning. It offers a level of participation for the student, which aligns with both the psychological and physical commitment to learning (Kuh et al., 2010). Chickering and Reisser (1993) proclaim, "A student's most important teacher is often another student" (p. 392). When students connect with each other, especially in groups, the connections become an anchor (Chickering & Reisser, 1993) for success. Group cohesion influences behavior (Chickering & Reisser, 1993) and creates a sense of universality (Yalom, 2005); therefore, allowing for identity, competence, and relationship building (Chickering & Reisser, 1993).

Supplemental instruction has the elements to promote group cohesion and shape students' identity, as the research supports the effectiveness for academic persistence, yet it does not identify if any underlying or ancillary effects add to students' academic

success (Bowles, McCoy, & Bates, 2008; McCarthy, Smuts, & Cosser, 1997; Zaritsky & Toce, 2006). However, there is strong evidence that connections are generated for the developmental education student when engaging in SI (Skoglund, Wall, and Kiene, 2018; Zaritsky & Toce, 2006). These connections are explicitly linked to academic success and do not explore any additional connections that may be related to building relationships, defining identity, and combating emotional issues (Zaritsky & Toce, 2006; Skoglund, Wall, and Kiene, 2018).

Conclusion

Linking students to educationally purposeful activities, such as SI, can provide the student with the tools to navigate the college experience. Offering focused holistic experiences will encourage and contribute to the student's success, leading to a stronger, emotionally developed student who has the ability to combat emotional stress and crises that often deter academic success (Wolf-Wendel, Ward, & Kinzie, 2009). Yet, the research aligned with SI does not offer an understanding of how this type of academic support can or does combat the emotional issues community college students face.

Because of the lack of research connecting identity building and emotional support in SI, I used a grounded theory approach to generate theory that makes meaning of developmental education students' SI experiences through group interactions. Drawing from the plethora of literature on SI and identity building, I explored the experiences developmental education students have during SI group sessions. Using a grounded theory approach, I connected to the emotional experiences of how group experiences create relationship connections that build competence and assist with identity development, competence, and relationship building.

Chapter 3

Methods

As discussed in the literature review (Chapter 2), nearly all the research on supplemental instruction is siloed and only focuses on SI as an academic support service designed for retention and persistence. The literature review examined student success and addressed the disparity between SI and holistic supports. Additionally, Chapter 2 pointed to the gap in the literature for how SI recipients make meaning of their experiences in SI.

This chapter discusses the methodology used in my study, my role as the researcher, and the research model. The research questions led this section and defined the inquiry - what the study investigated (Corbin & Strauss, 2015). The rationale for the research design offered a reason for using a constructivist grounded theory (Charmaz, 2006) approach and why I examined how developmental education students make meaning of their experiences in SI. This chapter continues with a discussion of the data collection and analysis and concludes with the limitations, validity construct, and ethical considerations.

Strategy of Inquiry: Grounded Theory

Research is a significant component for the development and expansion of professional practice, and the appropriateness of the research design is dependent on the topic and research questions (Birks & Mills, 2015). The methodology, or strategy of inquiry, needs to be aligned with the researcher's philosophical ideals, from both an ontological and epistemological perspective (Mills, Bonner, & Francis, 2006). A researcher should examine his/her/their experiences and expertise in choosing a

methodological design, as perception and knowledge of the social world will undoubtedly influence the research process (Birks & Mills, 2015; Mills, Bonner, & Francis, 2006). A researcher's philosophy is influenced by the context in which he/she/they acquires knowledge (Birks & Mills,2015). Charmaz (2006) asserts that "methods are merely tools" (p. 15) and that it is essential to ascertain how collecting data will inform which phenomena will emerge, how, when, and where the data will emerge, and what sense can be made of the data (Charmaz, 2006).

Studying how students make meaning of their experiences in supplemental instruction and looking at SI as a holistic support model for student success necessitates a methodological approach that offers an opportunity to examine the participants' thoughts and feelings (Corbin & Strauss, 2015). This aimed to reach beyond just realizing a phenomenon (Rossman & Rallis, 2017) and was designed to learn how students make meaning of their experiences in SI. Therefore, using a qualitative, field-based research method helped me yield a richer understanding of the data (Creswell, 2005; Creswell, 2007). To elicit the viewpoints of developmental education students enrolled in a college-level course and engaged in SI, I used a constructivist grounded theory approach (Charmaz, 2006). This research approach acted as a method of enquiry to how these students made meaning of their experiences, intending to construct a theory (Charmaz, 2006) to be used to inform practice and policy on campus (Birks & Mills, 2015).

Grounded Theory

Grounded theory seeks to generate theory specific to meaning-making through inductive data collection (Mills, Bonner, & Francis, 2006). First established by Glaser and Strauss in 1967, the classic grounded theory fundamental concepts countered

traditional scientific research. Data in grounded theory are collected first, then used to generate theory rather than stating theory and collecting data to support a hypothesis (Foley & Timonen, 2015; Glaser & Strauss, 1999). The key concepts of classic grounded theory rest on theoretical sampling, coding, constant comparison, saturation, and memo-writing (Kenny & Fourie, 2014). Glaser and Strauss established these rigorous methods to generate data collection coupled with coding, comparison, and organization into conceptual groupings, allowing for emerging theory (Kenny & Fourie, 2014).

Constructivist Grounded Theory

Differing from the classic grounded theory developed by Glaser and Strauss, Charmaz (2006) puts forth the constructivist view, which posits the examination of reality. Using a reality frame, the constructivist approach to grounded theory allows the researcher to engage in data discovery and a researcher-self-discovery (Charmaz, 2006; Charmaz, 2016; Chun Tie, Birks, & Francis, 2019). This approach depends on how the researcher acquires and maintains his/her/their awareness and "methodological self-consciousness" (Charmaz, 2016). The constructivist approach involves critical inquiry, dissecting and examining personal viewpoints and the way we make meaning of the world around us. A constructionist approach rests in "the how," and sometimes "the why" individuals make meaning of a situation (Charmaz, 2006).

Constructionists' interpretation of the data makes meaning of the participants' experiences and relationships. It posits that a constructionist researcher must be in touch with and reflect on his/her/their views, interpretation, and subjective experiences (Charmaz, 2006; Charmaz, 2016). While researchers do not typically engage in the depth of reflexivity, this notion allows for the researcher to explore his/her/their thinking

throughout the process, bringing awareness to self-consciousness (Charmaz, 2016; Chun Tie, Birks, & Francis, 2019). The self-consciousness connects the intersectional influences associated with power, identity, bias, and marginality, equally for the researcher and the participants (Charmaz, 2016). As the investigation is primarily about imparting an interpretation and analysis for a particular meaning of something, a researcher can easily influence the participants with his/her/their own ideals and perceptions, ultimately affecting the data. Being self-aware and examining my own identity bias allowed me to ground my ideas and allow the theoretical concepts in my data to emerge (Charmaz, 2006). Because I was interested in discovering how students make meaning of their experiences in SI, using a grounded theory constructivist approach allowed me to capture students' insights into their own identity, competence, and relationships.

Sensitizing Concepts

Sensitizing concepts help to focus on the essential elements of social interaction and offer directives for research (Bowen, 2006). Researchers using a grounded theory approach make use of sensitizing concepts as "tentative tools" to foster the evolving concepts identified and described in the data (Charmaz, 2006). The sensitizing concepts formulate the researchers' experiences that inform the overarching research problem (Bowen, 2006; Charmaz, 2006). Sensitizing concepts and disciplinary perspectives guide the researchers to the starting point and provide a way of realizing their own practices and inclinations towards ingrained experiences. While sensitizing concepts can be useful, specifically when developing interview protocol and examining the data, if the concepts

turn out to be unrelated or appear forced by subjectivity, the researcher must acknowledge this and throw the data out (Charmaz, 2006).

Sensitizing concepts from a perspective of identity development and group interaction were used to inform this study. As I investigated SI beyond its intended purpose, I situated the literature on identity theory from Chickering and Reisser (Charmaz, 2006). The topic of identity development, competence, and relationship building was considered merely to provide an understanding of how students make meaning of their experiences in SI. Additionally, as SI occurs in a peer-led group, I referred to Yalom's theory of group interaction to distinguish universality in group connections. Concepts that address SI as a holistic, supportive service for student success served as a vehicle to explore how developmental education students experience identity, competence, and relationship building through supplemental instruction and the role SI played in understanding their emotional needs.

Role of the Researcher

Drawing from my experience as a faculty member, an advisor for a co-curricular student organization (Phi Theta Kappa), and a licensed social worker, reflectively, I understood and saw firsthand how vital student engagement is to student success. I also believed that all students, but most importantly, high-risk students, needed guidance both academically and emotionally. To be effective, I believed these two areas needed to be addressed simultaneously. When students engage on campus, I believe that a sense of belonging is formed, allowing students to connect to the institution and invest in learning (Astin, 1999; Ning & Downing, 2010). A sense of belonging can help students identify how they are affected by their experiences. Drawing from my professional experience, I

agree with Erikson (1980) that identity is formed through exposure to environmental stimuli. Additionally, I agree with Chickering and Resisser (1993) that identity development occurs during environmental exposure.

Realizing these assertions, as I embarked on this study, I kept a reflexive journal and bracketed my ideas, opinions, and beliefs (Ahern, 1999). Purposefully engaging in reflexive bracketing aided in the validity of my data collection and analytic process (Ahern, 1999), keeping me aware of my bias and subjective awareness (Charmaz, 2006). Because I drew from my previous research and professional experiences, I remained cognizant of preconceived notions about student engagement and emotional development. To do so, I maintained a reflexive journal, which prepared me for the research action and evaluative process (Ahern, 1999; Charmaz, 2006). In addition to a reflexive journal, as I began data collection, I engaged in memo-writing. Memo-writing assisted me with reflection, helping to interpret the data and allow the theory to emerge (Charmaz, 2006; Rossman & Rallis, 2017). I further discuss how I engaged in memo-writing later in this chapter.

Research Questions

1. How do developmental education students make meaning of their experience in supplemental instruction?
    a. How do developmental education students experience identity, competence, and relationship building through supplemental instruction?
    b. What role does supplemental instruction play in how developmental education students' make meaning of their identity, competence, and relationship building?

2. What theory (theories) generates from exploring how supplemental instruction supports developmental education students' emotional needs?

Participants and Sampling

The central goal of grounded theory research is to develop or "ground" a theory in data collected from participants in the context of how they make meaning of their experiences. Constructivist grounded theory prioritizes the explored phenomenon over the methods used in the study (Charmaz, 2006). This study intended to involve developmental education students majoring in Teacher Education. The following discusses how participants were chosen and the sampling process I utilized.

At the onset of my data collection process, I used purposeful sampling to select participants for this study, specifically criterion sampling. Working with participants from a specific population provided a divergence from the random sampling that is typically used in quantitative studies (Rossman & Rallis, 2017). Because qualitative research intends to understand the processes, meanings, and contextual influences involved, using criterion sampling in this grounded theory study allowed me to move away from the classic generalization of variables (Maxwell, 2012; Rossman & Rallis, 2017). Criterion sampling is applied when the participants represent the individuals who have experienced the phenomenon and meet specific criteria (Creswell, 2007).

I intended to work with participants who placed at a developmental level in either English or English Language proficiency, were enrolled in the Teacher Education program at college-level, and participated in supplemental instruction. By identifying this specific group of participants, I would work with a homogeneous sample, one where the participants had commonality in several areas (Creswell, 2007) – placement, major, and

participation in a supportive service. This use of criterion sampling provided me with insight into specific phenomena and highlight meaningful outcomes that pointed to future research and practice (Creswell, 2007).

While there is a significant population of developmental education students enrolled at the research site, I only engaged with the Teacher Education Program. This was, and is still, the only program on campus conducting supplemental instruction with students who are dually enrolled in developmental education and college-level courses. At the time of data collection, the program included two courses which offered SI. The courses were taught by three different instructors. Each course was a 100-level introductory course, and there were two sections of each course. I chose participants from both courses and all sections of each course. I contacted the Teacher Education Program Coordinator for a list of students enrolled in the specified courses who met the criteria (i.e., developmental education or ELS placement). These courses were delivered through a remote platform [Zoom] at the time of data collection, therefore I reached out via email to the students provided to me, requesting an interview. Since the sample of students meeting the criteria was small, I emailed all the students enrolled in the specified courses separately, with a personal message requesting their participation. My goal was to sample participants from both the Fall 2020 and Spring 2021 semesters, interviewing fifteen to twenty participants. I intend to observe one session for each section. To do so, I reached out to the course instructors and the SI leaders to arrange participation in the session. I received a list of 48 students who met the criteria for my study, and I reached out to all 48 students.

Once initial data were collected and preliminarily analyzed, to define the emerging themes concretely, I engaged in theoretical sampling (Charmaz, 2006). My memo-writing led me to theoretical sampling and happened as the data emerged (Charmaz, 2006; Creswell, 2007). Theoretical sampling allowed me to develop and enhance my categories and themes, which sought significant data to expound my emerging theory (Charmaz, 2006). Ultimately, theoretical sampling helped me to discover variations in my data. I focused on the "actions, experiences, events, or issues, not the individuals" to learn how, when, and why there was variation in my theoretical categories (Charmaz, 2006, p. 109).

To account for key categories and the unanswered questions about the phenomena, theoretical sampling helped me define my categories and explicitly identify any considerations needed to be addressed (Charmaz, 2006; Corbin & Strauss, 2015). Based on the results from the initial sample, to engage in theoretical sampling, I identified a sub-set of participants. These participants helped to confirm my initial findings and expand and hone the findings in my emerging theory (Charmaz, 2006; Creswell, 2007). Since the sample size was smaller than originally intended because of COVID-19, I returned to the original sample so that I could expand on the data until no new categories emerge, hence causing saturation (Charmaz, 2006).

Saturation

Theoretical categories are saturated when data no longer generate new insights or divulge new concepts or patterns that inform the core categories (Charmaz, 2006). I considered saturation when I no longer found gaps in the emerging major categories (Glaser & Strauss, 1999). I was careful not to confuse saturation with not realizing the

same patterns continuously and worked to conceptualize the patterns (Charmaz, 2006). Charmaz (2006) asserts no explicit standards for saturation and notes that saturation occurs when the data yield no new properties, so to do this, I was intentionally reflexive when conducting interviews and observations. Additionally, I depended on memo-writing and concept mapping to help me determine if I was duplicating patterns.

Setting

I conducted my research at a New Jersey urban community college. This college is located in the heart of a low-income urban area. Students who attend this school align with the CCRC statistics discussed in Chapter 2; however, more than 80% of students enrolled test at a developmental level. Around 70% are students of color from low-socioeconomic inner-city school systems, are first-generation students, and live in poverty. In 2018, over 1,300 students were placed at the developmental level in English, Math, and/or below English Language proficiency (PCCC Institutional Research Department, 2019). These students' graduation rate falls below 10%, and approximately 60% take more than five semesters to complete the developmental sequence, if at all (PCCC Institutional Research Department, 2019).

Given (2008) discusses how qualitative studies are conducted in a natural setting. The natural setting is defined as a non-manipulated setting and does not include control and experimental groups (Given, 2008). I chose to conduct this study in a New Jersey urban community college. I worked to ensure the setting was comfortable for the participants. Typically, any interaction with participants would be on or adjacent to the campus setting, and I would allow the participants to select the location. However, with

COVID-19 as a pressing issue and still high risk at the time of data collection, I conducted my interviews and observations through an online medium (e.g., Zoom).

Salmons (2016) discusses the importance of determining the difference between data collection using online technology to investigate real-world, face-to-face phenomena or data collected via online to explore online phenomena. For the purposes of my study, I used remote, online technology to explore real-world, face-to-face phenomena. During the time of data collection, the SI sessions were conducted through remote learning. Therefore, I was forced to interview and observe my participants solely using remote technology. While engaging in the interviews and SI sessions, I paid close attention to whether or not I needed to determine if the remote interaction played a factor in the study. I align with LoIacono, Symonds, and Brown (2016) assertion that conducting interviews using online technology does not hinder the ability to build a rapport with the participants. My interactions were seamless, and I was able to connect with each participant to gather the necessary information. The participants were very comfortable with Zoom, both during the interviews and the SI group sessions. I attribute the comfort to the time the students have been engaged with Zoom because of course delivery during this pandemic. There were no connection interruptions other than minor screen freezing, which everyone is seemingly adjusted to, which aligned LoIacono, Symonds, and Brown (2016) contention that even with the rare occasion of a connection interruption, resuming the process was seamless.

The college where the study was conducted is committed to exploring programs and initiatives that focus on enhancing student success. The SI program is new and required attention. By researching how students make meaning of their experiences in SI,

I was able to offer the college community insight on increased practice, the need for further research, and policy development, which is further discussed in Chapter 5 (Maxwell, 2012). Additionally, the research provided information that allows us to view SI through an uncharacteristic lens.

Data Collection Methods

In grounded theory, data collection protocols are typically interviewing and observations; however, it may include a myriad of instruments. For the purposes of this study, the protocols included individual interviews, observation of SI groups, and the use of analytic memos, and concept mapping.

Interviewing

I engaged in intensive interviewing. Intensive open-ended, semi-structured interviewing provided me with an in-depth exploration of how my participants make meaning of their SI experiences (Charmaz, 2006). I used the literature discussed in Chapter 2 to develop the interview questions. The interview questions sensitized concepts from the idea that identity development and group interaction can inform how students make meaning of their experiences in SI beyond its intended practice. I drew from Chickering and Reisser's (1993) research to generate questions to explore how developmental education students experience identity development, competence, and relationship building. Furthermore, I took from Yalom (2005) to build questions designed to examine the students' peer-to-peer and group interactions and included questions intended to engender responses aligning SI as a holistic, supportive service for student success.

While Corbin and Strauss (2015) suggest using unstructured interviews, that unstructured interviews provide "the richest source of data for theory-building" (p. 38), I will engage in a semi-structured interviewing approach. The semi-structured approach allowed me to probe my participants with a series of predetermined open-ended questions (Given, 2008). I then asked unplanned follow-up questions as the participants offered insight into their experiences (Rubin & Rubin, 2012). I incorporated both approaches to the interviewing process, which facilitated a conversation focused on my research questions and corrected any predispositions (Charmaz, 2006).

I designed interview questions centered around how students make meaning of their supplemental instruction experiences and what role SI played in identity development, competence, and relationship building. Using the literature on student success models and holistic supports, I crafted the questions to understand how these students made meaning of their experiences. While I intended to interview fifteen to twenty participants from the current and most recent past semester, I ended up interviewing twelve participants.

Observation

Observation is a productive, grounded theory data collection method to gain information on how interaction occurs (Corbin & Strauss, 2015). While interviewing provided me with direct information from the participants, being an observer during SI sessions provided me with an opportunity to confirm the data from interviews and view any discrepancies in the reported data. Additionally, observing the SI sessions allowed me to explore the group's composition, social processes, and interactions between the group members (Fathi Najafi et al., 2016).

To limit influence as an observer in the group, and to account for myself being a variable, I asked the SI leaders to introduce my presence and why I was there, and I kept my camera off. Combining observation with interviewing helped me to provide context to what I witnessed (Corbin & Strauss, 2015). When I observed the groups, having the camera off helped in letting the interaction between the group members and the SI leader unfold (Corbin & Strauss, 2015). I watched for incidents and events that aligned with my research questions, paying close attention to any significant happenings discussed in my interviews (Corbin & Strauss, 2015).

Yalom (2005) asserts that universality only occurs within a group when the facilitator allows the group participants to communicate with each other rather than focusing on the leader (Nyumba et al., 2017). During the observation, I looked to identify how the participants interacted as a group (McLafferty, 2004). I experienced a degree of spontaneity in expression (Sim, 1998). Because SI is a group concept, observing the group interaction in addition to interviews offerd me insight into participants' feelings, views, understanding, and attitudes towards how they made meaning of their SI experiences (Fern, 1982; McLafferty, 2004).

During the observations, I looked at how the students interacted with each other in the group and how much interaction happened between each group member. Additionally, I identified the cohesion of the group. The facilitator's character, social identity, and interpersonal skills were essential in creating a welcoming group environment that fostered group cohesion. While the SI leaders did have some influence over the group's process and interaction (Sim, 1998), I paid close attention to how the SI recipients responded to each other based on the leader's influence. Watching for this

interaction helped me to identify peer-to-peer influence and how relationships were fostered.

The SI groups in the Teacher Education program typically happen once weekly among the four course sections. These groups met virtually using Zoom technology. I visited and observed six group sessions throughout the semester, joining the existing Zoom rooms provided by the SI leaders. Interview protocol and matrix along with the observation protocol used can be found in Appendix A, Appendix B, and Appendix C.

Data Analysis

The data collection process allows for categories and themes to emerge, and through the process of analysis, a theory emerges (Charmaz, 2006). The data are refined concurrently through the process of shaping and reshaping, using an iterative process, which ensured continual improvement each time the data were questioned (Charmaz, 2006). I continuously reviewed the emergent categories, developing themes through the coding process until data saturation was reached. Holton (2007) argues that coding is the fundamental process in grounded theory that drives the "conceptual abstraction of data and its reintegration as theory takes place" (p. 265). In qualitative research, a code is a word or brief phrase used to characterize significant and relevant themes within the data and help the researcher make meaning of the transcript (Saldaña, 2016). Codes help to define the data being analyzed and allow the researcher to examine the data in an organized way.

Coding is not labeling, but the process of linking data (Saldaña, 2016). Coding for a grounded theory study "generates the bones of analysis" (Charmaz, 2006, p. 45). Coding is the root of the analysis and shapes the frame of the study, linking the data

collection and the nascent theory (Charmaz, 2006). Classic grounded theory discusses both substantive coding and theoretical coding (Charmaz, 2006; Corbin & Strauss, 2015; Holton, 2007). Substantive coding, which begins through initial coding, allows the researcher to work directly with the data through fracturing, the process of dismantling the data, and exploring the distinct components of the data for differences and similarities (Priest et al., 2002; Holton, 2007).

Initial coding in grounded theory allows the researcher to stay open when exploring the data and helps the researcher to detect the emerging theories from the data (Charmaz, 2006). Engaging in initial coding helped me to stick close to the data, and then later in the analysis process enabled me to define the core concepts in the data (Charmaz, 2006). To ensure continuous comparison of the data, I began with process and in vivo coding. Process coding consists of using words or phrases that denote action (Charmaz, 2006) and helped me to apply codes by using gerund (-ing) words to denote the actions in the meaning-making process (Onwuegbuzie et al., 2016). Gerunds aid in identifying the connections in the action and grounds the data, facilitating the construction of theory (Charmaz, 2006). By using gerunds, I was able to emphasize and conceptualize the links in the data (Charmaz, 2006). The initial cycle of process coding included word-by-word coding and line-by-line coding. I intentionally looked for words that indicated action, while keeping the codes simple and precise (Charmaz, 2006).

In vivo codes help to reveal the figurative ideas of participants' language and how they make meaning of the experience (Charmaz, 2006). In vivo coding helped me to obtain codes from the data using language and terminology that set up an in-depth understanding of the direct stories, ideas, and meanings conveyed by each participant

(Charmaz, 2006; Saldaña, 2016). As the in vivo coding is an inductive method to derive the codes from the data, using in vivo coding allowed me to capture the participants' perspective (Charmaz, 2006; Onwuegbuzie et al., 2016). In vivo codes were utilized to analyze my views and ideas and acted as a vehicle to interpret how I reflected on my findings (Onwuegbuzie et al., 2016).

Both process and in vivo coding will allowed me to address the structure of my research questions and make meaning of my interviewee's experiences while gaining an understanding of how my interviewees referred to the concepts I asked about in my interview questions. Using process coding aided me in selecting words, phrases, and expressions that my interviewees used frequently, but more importantly, helped me understand the interviewees' perspective (Charmaz, 2006). This coding process presented me with an opportunity to see the meaning and underlying inferences of my interviewees' expressions (Saldaña, 2016) so that I stayed away from preconceived categories (Charmaz, 2006).

Second cycle coding is described as an advanced way of reorganizing and reanalyzing data (Saldaña, 2016). During the second-cycle coding, I detected the emerging categories, themes, and concepts (Saldaña, 2016) from the initial data collected through process and in vivo coding. I used axial coding during the second cycle of coding. Axial coding helped to describe the categories, properties, and dimensions of the data (Corbin & Strauss, 2015; Saldaña, 2016). Axial coding assisted me in discovering how the categories and subcategories connected and provided a broader linkage within the data. Saldaña (2016) emphasizes that axial coding is a way to broaden the analytical work from initial coding. The objective of using axial coding during the second cycle is

to purposefully and deliberately reconstruct data that may have been fractured during the initial coding process (Charmaz, 2006; Corbin & Strauss, 2015; Saldaña, 2016).

I established a codebook to ensure clarity and transparency as I engaged in data analysis. To keep the coding process organized, developing a codebook helped to keep an accurate collection of the codes and their explanations (Saldaña, 2016). Using a codebook allowed me to organize my codes into major categories and reorganize the categories as I engaged in the analysis (Saldaña, 2016). I labeled and named the codes and provided a detailed description of the code's characteristics and the criteria I used to include or dismiss a theme (Saldaña, 2016).

Analytic Memos

To connect to the data collection process and to identify themes and concepts within my codes, I used memo-writing. Memo-writing is an analytic process believed to be a crucial method that establishes quality and connection in a grounded theory study (Chun Tie, Birks, & Francis, 2019). Memo-writing enabled me to elaborate on emerging categories and themes, identify the relationships between the two, and helped me to discover the gaps in the data (Charmaz, 2006). Engaging in memo-writing assisted me in being reflective when documenting how I interpreted my ideas. The memo-writing process also pushed me to think critically about the data and aided in making connections as the data took shape (Charmaz, 2006; Chun Tie, Birks, & Francis, 2019). I wrote memos when I had an idea or discovered a concept I needed to explore. I sorted them to create an audit trail of my thoughts and how my ideas connected to the data (Charmaz, 2006; Chun Tie, Birks, & Francis, 2019).

I used memo-writing throughout the data collection process. Using memo-writing early in my data collection process helped me identify and establish the process (Charmaz, 2006). As the data collection developed, my memo-writing led me to the theoretical sampling process. Expanding the memo-writing process through the more advanced theoretical sampling, helped me trace and categorize my data and contextualize the categories as they emerged (Charmaz, 2006).

Concept Mapping

To create schemas that demonstrate the comparative relationship within my data, I used concept mapping (Charmaz, 2006). I engaged in concept mapping during the transcription and coding process. This provided me with a visual path in my data and offered me a graphical place to evaluate how I think about the data (Charmaz, 2006; Maxwell, 2012). I began the concept mapping by gathering words from the preliminary transcriptions of my interviews that aligned with my research questions. This map was large and somewhat disordered but allowed me to visualize the words and phrases my participants used to answer the interview questions. I worked through the mapping process or organize the initial map, creating a color-coded map that identified the emerging concepts. As I dug further into the coding process, I created a second map that outlined specific areas which helped me formalize the emerging categories. Next, as I further engaged in the coding process, I created a third concept map, pulling phrases that I identified from my interviews and observations, which helped me to organize the data form the themes. The concept mapping ultimately helped me to broadly arrange my data and prevented me from engaging in any of my preconceived ideas (Charmaz, 2006).

Limitations

There were limitations in this study; these limitations are outlined here but are further discussed in Chapter 5. This study explored how developmental education students make meaning of their experiences in supplemental instruction and what role SI plays a part in addressing their emotional needs. In this study, emotional needs were defined as identity, competence, and relationship building. While SI leaders were observed, the focus was on the recipients. I did not interview the SI leaders as my intention was to focus on understanding how the recipients of SI made meaning of their experiences. I acknowledge that the SI leaders played a role in the recipients' identity, competence, and relationship building; however, I did not explicitly examine the results or influence on the SI leaders.

Another limitation aligns with race and culture. My study was conducted at an urban community college where 70% of the population identify as students of color and more than 50% who identify as first-generation students from immigrant families. The focus of this study is on the academic placement of the student and did not specifically address race or culture. As discussed further in Chapter 5, future research may be helpful in confirming any emerging theory where culture and race are indicators.

While I intended to study only developmental education students, they are not the only population enrolled in an urban community college who face emotional impediments. Further research should be conducted to understanding creating a holistic approach to academic support services with student groups other than developmental education students.

Validity and Quality

Glaser and Strauss (1999) propose grounded theory as "credible, plausible, and trustworthy" by discussing the "level of accuracy of data needed for generating the theory" (p. 223). Grounded theory demonstrates how integrating the theory manages to rectify any "inaccuracies of hypothetical inference and data" (Glaser & Strauss, 1999, p. 223). Glaser and Strauss (1999) have thoroughly argued an appropriate way to generate a significant theory "grounded" in accuracy and relevance to the data it aims to explain. Essential characteristics deemed fundamental to grounded theory involve a continuous comparison of the data, coding, theoretical sampling, memo-writing, theoretical sensitivity, and saturation (Charmaz, 2006; Mills, Bonner, & Francis, 2006). By using these methods, I was able to ensure the data provided a strong argument for my analysis and evidentiary support for the claims made (Glaser & Strauss, 1967; Charmaz, 2006).

Credibility lies in the "intimate familiarity" the researcher has with the research setting or topic and suggests the researcher must believe the data are sufficient to warrant the theory (Charmaz, 2006). To do so, Charmaz (2006) emphasizes the importance of studying the "range, number, and depth of the observations" included in the data. That the researcher needs to thoroughly analyze the data for themes and categories and ensure the categories encompass a wide range of experiential examination. Charmaz (2006) further explains the significance and value in asking "are there strong logical links between the gathered data, the argument, and the analysis" (p. 182).

Ethical Considerations

I conducted my research within the organization that I am employed. Rossman and Rallis (2017) assert that ethical practice in qualitative research acknowledges that the

researcher “draws upon his/her/their own moral principles to guide the decision making” (p. 59). I discussed confidentiality with the participants, and they were informed that the answers to their questions or their interactions would only be used for my research purposes. I assured them that their individual responses would not be shared directly with faculty or anyone who may be responsible for grade allocation.

I took into account that I might be faced with that I knew, and to do so I took a researcher approach and worked to empower the students as the experts in the room. While I did not find myself in a dual role, advisor-student, or advisor/professor-student, and did not know any of the students I interviewed or observed, some of them knew who I was. To minimize this quandary, I worked to create empowerment, the participants chose the dates and times they are most comfortable meeting and I kept my camera off while egnaging the observations (Rossman & Rallis, 2017).

I used journaling and memo-writing to identify my fundamental bias in this study. I focused on where my ideas stemmed from and how I viewed them throughout my research. To continued to check my bias, to prevent bias perception (Rossman & Rallis, 2017). I journaled throughout the process ensuring that I was not leaning towards any situation or event that skewed the data.

Rossman and Rallis (2017) discuss the importance of checking intuition and how the researcher responds to a situation. I identify with the importance of building relationships with participants to ensure trust. As a trained social worker, I continuously work to check my countertransference and be reflective, asking myself the questions Rossman and Rallis (2017) pose – “What’s wrong here?”, “Why am I uneasy?” (p. 69). I purposefully asked these questions throughout the process in order to identify my feelings

and not transfer them on to the participants. To remain objective, I drew from my values as a social worker, which are rooted in the ethical tenets of social work – service, social justice, dignity and worth of a person, the importance of relationships, competence, and integrity (National Association of Social Workers (NASW), 2017).

Goals in research involve the researcher's motives, desires, and purposes for engaging in the research and can have a deep and reflective effect on the design of the study (Maxwell, 2012). A researcher may be cognizant and deliberate with the influence of the research design, or the influence may be implicit. Historically, researchers have constructed a separation between their research and their lives. Contrariwise, Maxwell (2012) discusses the impossibilities and harmfulness of the separation. By attempting to create the separation, the researcher can generate the impression that the research is driven without any personal motives or values. Maxwell (2012) asserts that by misguiding the impression, the researcher will often ignore their influence on the research process and conclusions. This is where reflective practice was essential in my research.

With my professional background, I went into my research with a deep understaing that I mat influence my research. I acknolwed that my study was designed based on a combination of my interest in the students I serve, my professional ideals, and my values. I did not separate my values and interests, which helped me to remain connected to my insight and intention. Remaining connected to my insigth and intention was the root of my engagment in reflective practice so that my data was not subject to distorion. Implementing what Schon (1983) describes as reflecting-on-action, I was able to discern any issues across my research design. To ensure ethical practice, I worked to develop measures that reframed the concerning problems and implement solution-

oriented actions when necessary (Schon, 1983). Being reflective, especially through reflexive journaling and memo-writing, allowed me to realize and acknowledge any difficulties with my research and provided me with a critical lens to evaluate and examine my beliefs and assumptions as I worked with the participants and the data. Reflecting on the process permitted me to engage in a reflecting-in-action process (Schon, 1993). The reflecting-in-action process occurred as I analyzed the data and discovered the emerging theory (Schon, 1983; Glaser & Strauss, 1999; Charmaz, 2006).

Conclusion

This study intended to use a constructivist grounded theory approach to study how developmental education students made meaning of their experiences in SI. I used a thorough approach to data collection and analysis and situated the literature from Chapter 2, which allowed for the emergence of my theory. I collected and analyzed my data concurrently to achieve saturation. I engage in reflexive and reflective practice, to remain transparent and not compromise the validity of my study. Finally, examined the literature discussed in Chapter 2, and remained mindful that the theories and concepts discussed were merely for reference and not to be used to hypothesize theory.

Chapter 4

Findings

The purpose of this constructivist grounded theory (Charmaz, 2006) study was to explore Supplemental Instruction (SI) beyond its intended use and generate a theory that explains how developmental education students make meaning of their experiences in SI. To examine this purpose, I attempted to answer the following research questions:

3. How do developmental education students make meaning of their experience in supplemental instruction?
    a. How do developmental education students experience identity, competence, and relationship building through supplemental instruction?
    b. What role does supplemental instruction play in how developmental education students' make meaning of their identity, competence, and relationship building?
4. What theory (theories) generates from exploring how supplemental instruction supports developmental education students' emotional needs?

SI was initially developed through the University of Missouri-Kansas City (UMKC) to assist non-traditional students enrolled in historically difficult courses at four-year institutions. SI was intended to create a collaborative, peer-driven out-of-class learning environment (UMKC, 2020). Today, community colleges have adapted SI as a support tool for historically difficult courses and instituted SI for students who place below college level to help increase retention and persistence. Chapter 2 highlights the research on supplemental instruction and identifies how SI is delivered in silos and only concentrates on SI as an academic support service intended for retention and persistence.

Additionally, Chapter 2 explores student success and identifies the gap between SI and holistic supports.

To understand how developmental education students enrolled in a college-level course make meaning of their experiences in SI, I used a constructivist grounded theory approach (Charmaz, 2006). My approach served as a method of enquiry for how these students make meaning of their experiences in SI, connecting identity, competence, and relationship building to their success as a student. Additionally, I attempted to define the role SI played in identity, competence, and relationship building and sought to understand how students made meaning of their experiences in SI through these contexts. This chapter outlines the themes that emerged through the data collection, which serve as the foundation of the emergent grounded theory of this study (Charmaz, 2006).

To arrive at the grounded theory, I sensitized concepts from Chickering (1969), Chickering and Reisser (1993), and Yalom (2005) to explore how students make meaning of their experiences beyond the intended use of SI, linking identity with group cohesion. The use of peer-to-peer interaction is the crux of SI, but has been viewed solely as a means to increase retention and grade attainment. SI has not been considered a way to support the emotional connections made between students, nor has the influence the peer support provided in SI has on students' persistence.

Exploring the group interaction, how students work with each other, and the connections they make helped to understand how students make meaning of their experiences. I approached my data collection from both an ontological and epistemological perspective (Mills, Bonner, & Francis, 2006). I paid close attention to my own views about the topic, journaling about my previous experiences as a faculty

member and advisor, and what I learned from my literature review to not influence the data. However, I used my experiences to unpack and make sense of the data as the concepts emerged (Charmaz, 2006; Corbin & Strauss, 2015). Connecting my experiences and the knowledge engendered from my literature review allowed me to analyze how students make meaning of their experiences in SI and begin to ground the theory. I was able to explore SI as a holistic support model for student success (Corbin & Strauss, 2015), which resulted in a broader understanding of how to address the academic needs of students. While we typically measure SI and its success by the grades students receive in the course compared to those students who do not attend SI sessions, the following chapters will demonstrate that supplemental instruction is indeed a tool that supports students far beyond its intended use.

This chapter begins with an overview of the grounded theory, followed by a summary of data collection as outlined in Chapter 3. The chapter then provides an analysis of my data and findings. This synopsis will review my interview and observation process and link my journaling and memo writing with my coding process, which led to the emergent themes and proposed theory. The chapter will summarize the themes revealed in the data and point to Chapter 5, which discusses the answers to my research questions and the use of the theoretical concepts applied in the emergent themes and proposed theory.

Introduction to the Model: The Supplemental Instruction Culture of Care Model

Intending to prepare students for college-level work, developmental education is a common practice at community colleges. Combining college-level course enrollment with supplemental instruction provides developmental education students with hope and

potential for moving through the developmental sequence faster. Initially, the placement provides students with an increased confidence level, but the emotional barriers urban community college students often face tend to plague their belief in success. While SI is not designed nor intended to support the emotional needs of a student, this study revealed that the issues students face (e.g., language barriers, poverty, culture, family, trauma) naturally become a part of the discussion in SI sessions. Sharing their personal concerns and struggles created a sense of intimacy and trust among the participants and the SI leader and provided the basis for relationship building. The data exposed the environmental and emotional issues these students face daily and the struggles they endure to overcome or cope with the barriers to completing their academic work.

These barriers affect student well-being and bring about struggles with academic identity. Almost every participant discussed their difficulties, with many of them citing both emotional and academic issues. Language was identified as the most significant barrier, and the participants identified themselves as ELL students, regardless of their language competence. However, immigration, trauma, poverty, (un)employment, family, and cultural issues were all at the forefront of the participants' reported struggles. They frequently discussed areas that were impeding their self-esteem and academic abilities. Additionally, they discussed difficulties that impacted their well-being. While they discussed the barriers that affect their self-esteem, well-being, and capability and often questioned their academic abilities, they connected with each other over their struggles.

These connections forged friendships, and the peer interactions created a culture of care. They often encouraged each other and provided emotional support, specifically

because each participant reported identification with the struggles in one form or another. The encouragement and reassurance fostered connections and influenced their behavior. The initial support was directed at the academic work but constantly connected to the emotional issues.

Constructed using a grounded theory approach (Charmaz, 2006; Corbin & Strauss, 2015), the following Model illustrates how SI exposes barriers to learning but also promotes relationships. Discussing how students make meaning of SI leans towards relationship building. The participants identified that SI is a place to feel cared for and where they forge friendships, and those friends help them succeed academically. However, the barriers they face depict how they see themselves as students. The participants' environmental and emotional issues lead to their identity development, but they do not always explicitly connect their identity to their academics. Conversely, they do connect their identity to their barriers, and their identity is tied to how they see their competence level, and for these participants, language played a significant role in their competence level. Additionally, family and culture played a considerable part in the context of their capability to complete the work.

The Supplemental Instruction Culture of Care Model (see Figure 5) displays the connections between the exposed barriers and the relationships and how these areas lead back to the behavior in SI. Students demonstrated working together as a team and encouraging each other, which helped to develop relationships in the group. The developed relationships influenced their behaviors both academically and emotionally, specifically in problem-solving behavior. *The Supplemental Instruction Culture of Care Model* (see Figure 5) shows how the identification and exposure of the barriers connect

teamwork and problem-solving and leads to connected relationships and emotional support.

Figure 1

The Supplemental Instruction Culture of Care Model

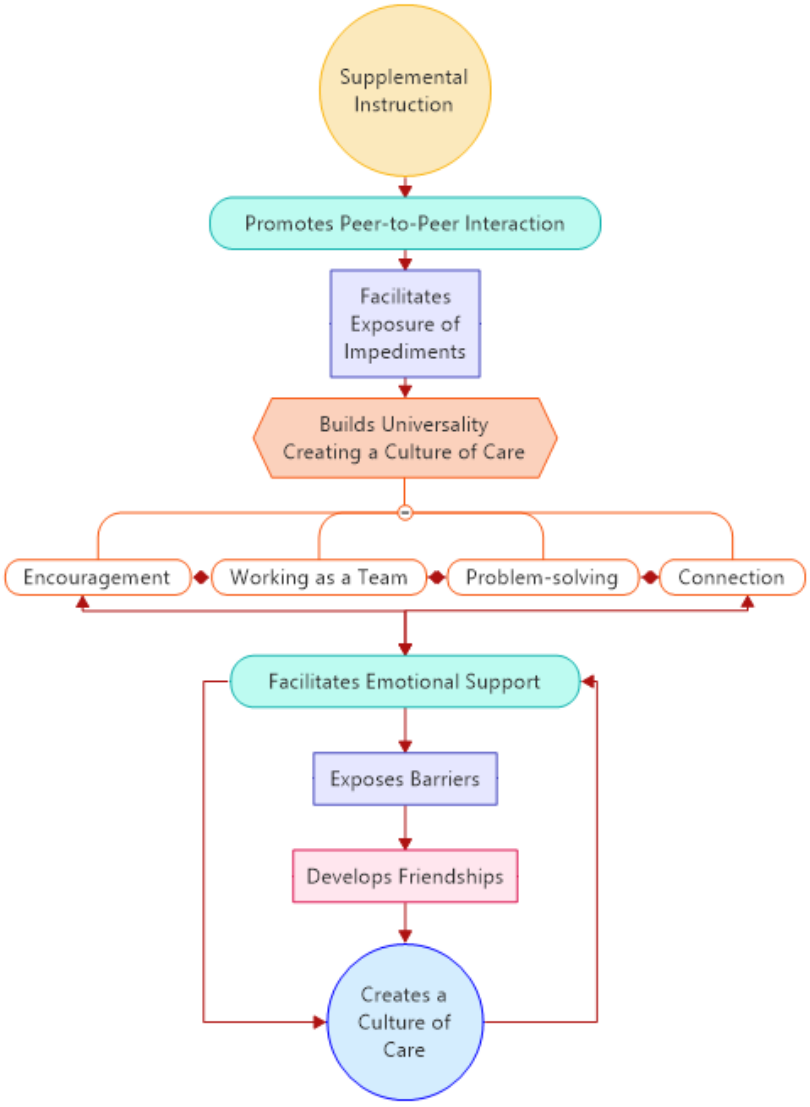


Figure 1 outlines the emergent themes (exposes barriers, promotes friendship, problem-solving, encouragement, connection, and working as a team) and connects the themes to the initial concepts in my research questions, linking my findings: Supplemental instruction (1) promotes peer-to-peer interaction; (2) facilitates exposure of impediments (3) builds universality creating a culture of care; (4) facilitates emotional support, creating a culture of care.

The environmental and emotional barriers students face affects their well-being. The participants identified their struggles with their academic identity, specifically English Language Learners who attach to their language barriers to their identity. The barriers students face impeded their self-esteem and perceived abilities to complete the academic work; however, the relationship connections and encouragement influenced the participants behavior. SI, as a peer driven academic support services facilitated emotional support and relationship building, and the peer-to-peer interaction created a culture of care (Note. The colors in the Model do not denote any significance). The following sections will explain the data collection process leading to the themes and the grounded theory.

Implementation of Data Collection and Analysis Process

A grounded theory study requires continuous data analysis and suggests that data analysis begins with the onset of data collection (Charmaz, 2006). I built my analysis process as I conducted the interviews and participated in the observations. I began by taking notes and identifying words that stood out to me. I organized my process to expect that each step would help me discover insights that would ultimately inform theory development (Charmaz, 2006). My analysis process began with my interviews and

observations, then the coding process, which led to concept mapping, and further coding. I paid close attention to my designed approach to ensure I incorporated all the measures I had discussed in Chapter 3. By doing so, I focused on the planned methods to ensure that I conducted a thorough application of the process, working towards theory construction (Charmaz, 2006). I journaled during the analysis process, which helped me to organize my thoughts and become more connected to the data. In addition to journaling, engaged in writing analytic memos. I wrote memos after each observation and interview, which served as a pivotal process in the analysis of my data (Charmaz, 2006).

Data collection for this study began in March and concluded in July 2021. The study took place at an urban New Jersey community college. I used semi-structured interviews and group observations. All participants were selected from the Teacher Education program, identified as students placed at a developmental level, and enrolled in college-level courses while participating in SI.

Participants

At the onset of my research, I intended to work with participants who placed at the developmental level in either English or English Language proficiency. This study included fifteen participants (see Table 1); nine were interviewed and observed, three were only observed, and three were only interviewed. Four were placed at the developmental level in English, and eleven were placed at the developmental level in English Language Studies (ELS). Of the interviewed and observed participants, eight identified their first language as Arabic, and four identified their first language as Spanish. I will note that the four participants who were placed in developmental English also identified English as their second language.

Table 1

Demographic Characteristics of Participants

Participant characteristics	Interviewed only		Observed only		Both Interviewed & Observed	
	n	%	n	%	n	%
Participants	3	20	3	20	9	60
Enrollment Status						
DevEd English	1	7	1	7	2	13
ELS	2	13	2	13	7	47
First Language						
Spanish	1	7	-	-	3	20
Arabic	2	13	-	-	6	40

Note. N = 15 (Detailed criteria for how participants were selected for this study are outlined in Chapter 3.) The students only observed did not formally identify their first language.

Interviewing

Initially, I set out to interview fifteen to twenty students who were enrolled in the Fall 2020 and Spring 2021 semesters. However, due to COVID-19, many students enrolled in Fall 2020 did not return, making the sampling pool smaller. Additionally, my only initial means of contacting the students was via email. I contacted forty-eight students and was able to connect to twelve. I made significant efforts to increase my sample size and reached out to each student four times. I offered an incentive in the form of a $20.00 gift card, yet the response rate was challenging. Subsequent to sending three emails to the students, the department allowed me to enter the virtual classrooms to

introduce myself and explain the emails sent and the interviewing process. Furthermore, when I was present in the group observations, the SI leaders encouraged the participants to engage in the interview process. After all of these efforts and approximately five months, I concluded my interviews with twelve participants.

Observations

I set out to observe four sessions of SI in the Teacher Education Program, which hosted students enrolled at college-level and the developmental level. I later learned from conversations with the SI leaders that while the SI sessions were open to all students enrolled in the courses, typically, only developmental education students attended. All of the students who participated in the SI sessions I observed were identified at the developmental level.

Initially I intended to observe three SI sessions. However, I was able to observe three SI sessions twice, for a total of six observations. The participants in the observations included twelve students, three of whom were only observed and not interviewed (see Table 1). Each session also included one SI leader (three different leaders). Two of the leaders spoke Arabic, and one spoke Spanish.

Transcriptions

I worked on transcribing each interview as it occurred in order to evaluate my interview questions. However, I was not always able to complete transcription prior to the next scheduled interview. Therefore, I took notes as each interview occurred, jotting down keywords and phrases I heard throughout all the interviews (Charmaz, 2006). Additionally, I used both journaling and memo writing to capture my thoughts and made notes about any additions to my questions. My notes helped me to stay connected to the

transcripts when there was a period of time between the interview and transcription. I worked to remain open to the data during the transcription process, looking for keywords and concepts to note and determining if I needed to adjust my questions. My journaling helped me to stick close to the emerging concepts and not make preliminary assumptions that may have caused me to ask leading questions (Charmaz, 2006). The memo writing allowed me to formalize my thoughts and the process in which I analyzed the data (Charmaz, 2006),

I began the transcription process using the transcript provided through the recorded Zoom interview. I manually reviewed each transcript, line by line, while listening to the recording, which allowed me to correct any discrepancies. Most discrepancies were due to enunciation, specifically because of the participant's accent. These discrepancies were easily corrected while listening to the recording. Reviewing the transcript line by line allowed me to further connect to the data. Each transcription provided words and phrases, which helped to formulate the initial concept maps. Together, the transcripts and concept maps allowed for patterns, categories, and themes to emerge.

For my observations, I used my observation protocol to take notes on how many interactions occurred as well as the types of interactions. I linked the number of interactions to the types and assessed the meaning of each interaction. I used supplementary counting to build on and further develop my findings (Hannah & Lautsch, 2011). This type of counting allowed me to augment my findings and "develop new insights" into my explored phenomena of interest (Hannah & Lautsch, 2011). The group permitted me to voice record the session, and I manually transcribed the voice recording.

I used the transcript to refine my descriptive notes and then reflected on what interactions took place. I counted the interactions (see Table 2) according to my observation protocol (see Appendix B) and then reviewed the interview transcripts to make meaning of the interactions.

Analytic Memos

I used analytic memos throughout the transcription and coding process to help me discern the information being collected. During and after transcribing the interviews and observations, I began with journaling to brain dump my ideas and thoughts. My journaling process helped me make sense of my data and led me to a more formal memo-writing process. Initial memos enabled me to organize my thoughts about the data and identify any predisposed ideas (Charmaz, 2006). The memo-writing process enabled me to make connections to the data and clearly recognize when bias or a pre-conceived notion arose. I continued to refer to my experiences and returned to journaling to flesh out my own ideals and what was occurring in the data. I again, then, wrote more formal memos to expand on the data. This allowed me to note specific words and phrases that resonated with each interview and observation and created a deeper connection to the data (Charmaz, 2006).

Initial memos helped to capture the preliminary ideas, concepts, and patterns from the interviews and observations. Later memos helped identify variations in the concepts and assisted in informing the data (Charmaz, 2006). Overall, each level of memo-writing allowed me to become closer to the data and helped me to move to the next step with clarity.

Concept Maps

As discussed in Chapter 3, I used concept mapping throughout the transcription and coding process. I intentionally engaged in concept mapping, in addition to memo writing. This intentional exercise aided me in bracketing my biases and assumptions and helped me organize the emergent concepts (Charmaz, 2006). I began the concept mapping process by capturing keywords and phrases that emerged in the interviews to visually track the codes and begin aligning them with my research questions. I then reviewed the observation transcripts to connect the emerging concepts. I continued to use concept mapping through the coding process until I reached saturation and solidified the emerging themes (Charmaz, 2006). The following provides an analysis of my concept mapping process and outlines the emerging concepts.

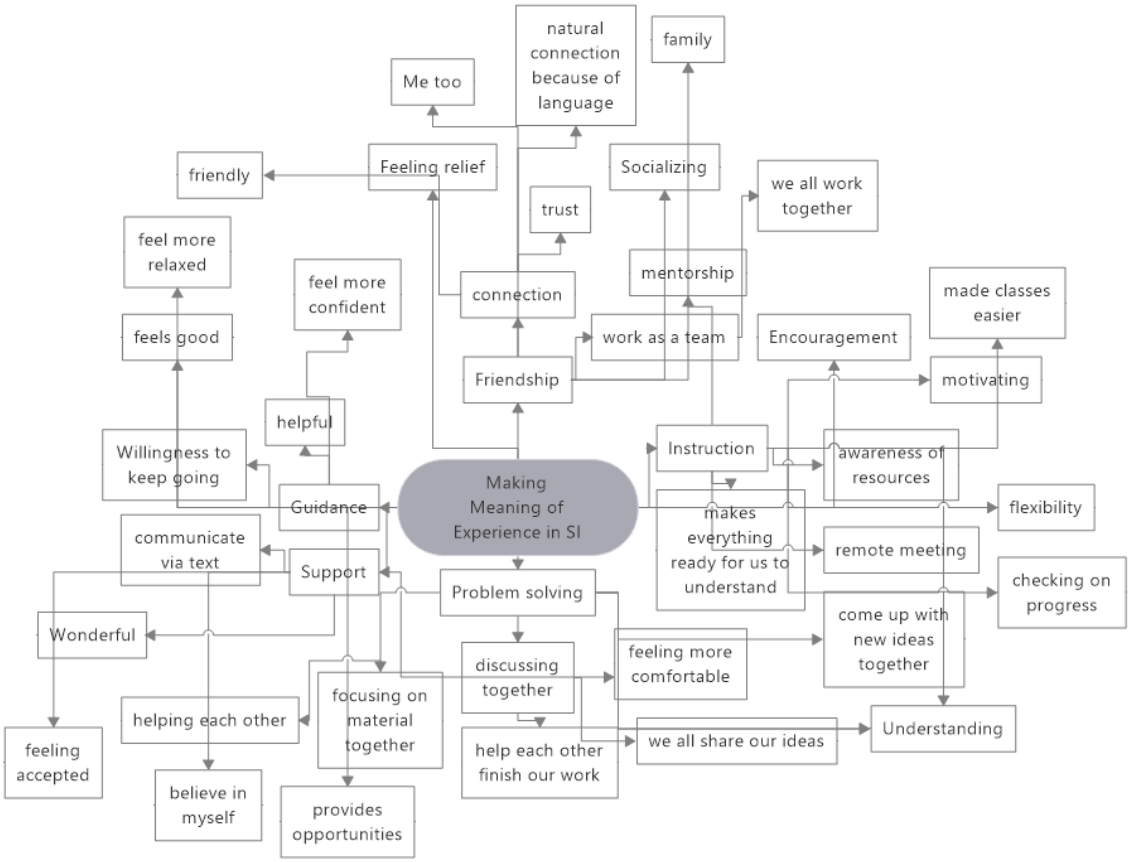
Concept Mapping Analysis

The initial concept mapping process allowed me to visualize where the concepts in the data were beginning to cluster into categories (see Figure 2). Figure 2 identifies keywords and phrases that helped me understand how the participants make meaning of their experiences in SI.

Initial coding of the interviews provided the platform for the initial concept map. With identity, competence, and relationship building as key concepts in my research questions, I initially looked to identify words that aligned with these concepts. Words like guidance, support, problem-solving, instruction, and friendship appeared in every interview transcript and were identified throughout the observation protocol.

Figure 2

Concept Map Created While Transcribing and First Cycle Coding Interviews, Outlining How Participants Make Meaning of Their Experience in SI



Guidance was described as supportive and helpful. The participants discussed that the guidance they received from the other group members and the SI leader helped them develop the willingness to keep going and feel more confident. EK shared, “We have guidance…the support in the group [SI session] feels wonderful…I always feel like I can

continue with school after a session." EK was not the only student to identify the guidance in SI as wonderful, BC stated, "SI is just wonderful, you feel so helped and support and we get guidance from our leader [SI leader] so we can get good grades." Support was a term that every participant used to describe their interactions in the group. AD shared, "There is no other place for school that I feel supported, maybe not even at home." AD's reaction was not isolated, KL shared, "SI guides us to do better work, to feel better, I feel more confident, I feel so, so much support." KL also described support in the context of problem-solving, "We support each other, we solve our problems together, and not just our school ones." She referred to problem-solving in the context of both academic and personal.

Similarly, FA shared about problem-solving, but also referred to personal issues, "We all there for each other… our leader [SI leader] she gives us guidance about the work, so we feel more confident… but we also help each other with problems, you know, not school but home and stuff." When asked further about problem-solving, specifically about the difference between the SI leader and the group members, FA differentiated by instruction versus friendship, "She [SI leader] is like an instructor, she guides us and tells us when we do good but also when we need to do better…group members are my friends, we help each other to feel better about everything." Friendship was a concept that arose throughout every interview and observation session, and every participant referred to the group members as their friends. I discuss friendship as an emergent theme later in the chapter and outline the importance of friendship in the context of relationship building.

I built upon these keywords and began to identify words and phrases that connected to each of these concepts. While connecting the concepts, I consistently

referred to my research questions for alignment as not to make assumptions. Figure 1 became the foundational coding and helped me to organize my codebook.

Once the codes were organized, I reviewed my interview and observation data for any additional areas that stood out, verifying I had a solid idea of the codes. To make connections and begin formalizing my categories, I organized the codes by colors (see Table 2) to create a more concrete visual concept map. Table 2 outlines how the codes are clustered by color, and Figure 2 displays the codes clustered by color.

Table 2

Initial Coding Concept Map Color Categories

Color	Category
Pink	Friendship
Peach	Problem Solving
Cream	Guidance
Lt. Green	Support
Lt. Blue	Instruction
Dark Pink	Emotions

Note. Colors represent clusters of codes that align with categories. (There is no significance to the actual color.)

Figure 3

Concept Map Color-Coded to Identify the Emerging Concepts

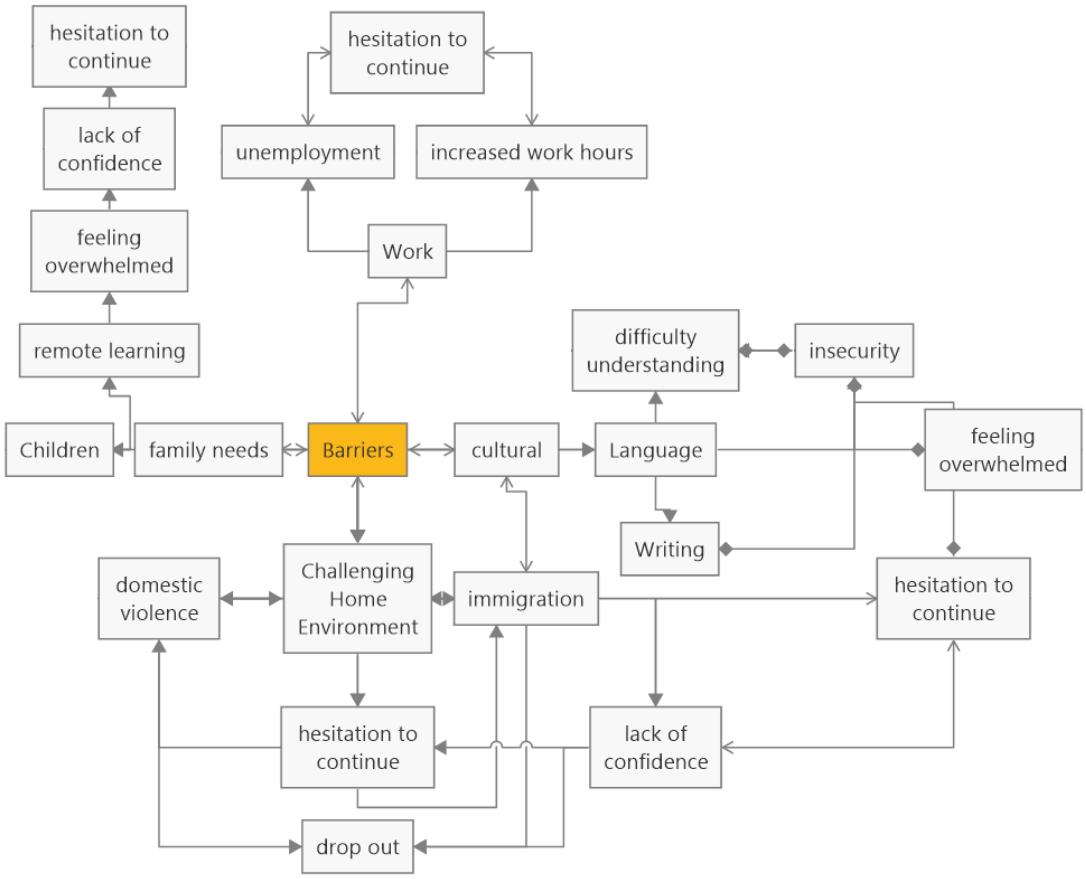
Figure 3 outlines the emerging concepts that align with how the participants made meaning of their experiences in SI and begins to shape how SI supports relationship building. The data begins to establish how students interacted with each other and how they feel about those interactions. They referred to each other as friends and discussed problem-solving, which demonstrates how their interactions formed connections. There is some evidence of identity and competence; however, after reviewing the concepts thoroughly, I noted a gap in how the student's experienced identity and competence.

After reviewing the concepts in Figure 3, I returned to the transcripts to detect any areas that could be related to identity and competence. Chapter 1 discusses the barriers that students who attend urban community colleges face, which create emotional distress, impeding academic success (Goldrick-Rab, 2010; Yue, Rico, Vang, & Giuffrida, 2018). This notion led me to look at the transcripts to identify any barriers or challenges the participants reported that aligned with identity and competence. Recognizing that emotional impediments often create deficits in a student's identity development (Chickering & Reisser, 1993; Erikson, 1980), I worked through the interview transcriptions with the intention of adding any reported barriers to the concept map.

However, through the second cycle of coding the transcripts, I realized that the barriers discussed were significant. To distinguish the detected barriers, specifically related to identity and competence, I decided to create a second concept map (see Figure 4). This map would outline the identified keywords and phrases the participants reported facing, which aligned with the emotional barriers to academic success.

Figure 4

Concept Map Outlining Emotional Barriers



I found myself focusing on the questions that asked what struggles the participants faced with school and what in their life shaped those struggles (see Appendix A). Additionally, I focused on the interactions in the observations that denoted barriers to academic work. The major categories that emerged from these questions and observations that I grouped as barriers were work, family needs, culture, language, trauma, and challenging home environment (see Figure 3). I confirmed these categories by reviewing

and constantly comparing (Charmaz, 2006) the interview and observation transcripts. An example of work as a barrier came from FA, she discussed how work has always been an issue with her studies, and how COVID created even more of a barrier to her academics, she stated, “I have to work to support my family, but I no make the money I need without my degree, so I work two jobs and that make it hard for me to study.” However, FA did report that having remote classes (via Zoom) and having SI remote was very helpful, that she could connect from anywhere. She stated, “Zoom is very much helpful, I can go to group [SI] on my lunch, and everyone is understanding of my work.” With every issue the participants discussed, their discourse demonstrated hesitation to continue with their degree pursuit. EK shared, “When it [schoolwork] gets hard, I wonder if I will get it, graduation seems like it will never happen for me.” Similarly, BC shared, “First working made school hard, now not working makes it even harder… all my kids home, and I just want to give up.” When questioned about giving up, both EK and BC shared similar sentiments, “…well, my friends, you know in the group, they help me…” and “…what keeps me going you ask… a lot of things, but mostly I don’t want to disappoint my friends in my group… they so helpful and we have a, how you say, a pact…we going to graduate.” While the members identified hesitation, they recognized SI as a safe place and a place to feel helped and cared for, a place where relationships are important to their success.

Identity did arise with the barriers. Participants referred to themselves as ELL students, undocumented, or in MD’s case, associated her identity with her trauma. She shared,

> I was in an abusive marriage, I thought school would help to keep me out of the house and make my husband proud of me, but it just made it worse… everything was worse, the abuse made me embarrassed to come to class…he wouldn't let me study and I wasn't sure if I could continue…I didn't think I would continue…I thought of myself as a victim who was trapped.

MD called herself a battered woman, "I am battered, you know how they say a battered woman." She associated her identity with her abusive relationship and connected her abusive relationship to her studies. She reported that coming back to school after she left her husband and attending SI helped her to feel more confident. She shared, "I never thought I would feel better about myself…the group [SI] helps so much, I now feel like I can do it." MD reported that her trauma was a barrier to her learning, "…sure the abuse kept me from learning and away from class…" and while leaving her abusive relationship helped her to return to school, attending SI provided her with confidence, "but now, I got this, and the group [SI] is so much a part of my desire to do good." MD's story is an example of how interacting in the group provides competence and addresses barriers to learning. She, like many of the participants, dealt with a challenging home life that contributed to her hesitation to continue and drop out. While SI did not help her leave her relationship, her attendance provided her with friendship and a space that felt caring, helping her build confidence, and connect to her abilities.

Reviewing both concept maps (Figure 3 and Figure 4) helped me to realize that by separating the positive feelings from the barriers, I could better recognize how the participants understood their identity as a student and how they felt about their

competence level. While this data began to corroborate why they were able to form such deep relationships in the SI groups, it only served to provide surface information as to how the participants connected to their identity or competence level. Though, the analysis of the concept maps did help me connect the concepts in the data emerging from my observations in the SI sessions with what the participants reported in the interviews. I discuss later how the observation data supports competence and relationship building and begins to outline identity.

Once I felt both initial concept maps were complete, I again reviewed the maps (Figure 3 and Figure 4) together to begin making connections as to how the participants experienced identity, competence, and relationship building through SI. This review led me to return to my interview and observation transcripts again, but this time to further code for responses to the questions related to defining and describing SI more explicitly. Here is where I focused the most on the role SI played, working to identify if the data connected to identity, competence, and relationship building and how these concepts related to the emergent themes.

I reviewed and explored the participant's answers and confirmed that working as a team, guidance, and friendship were central to their answers. When asked to define SI, FA stated, “So you feel like you have a mentor, that is how I define it, I would say they’re helpful. And like we work as a team.” When asked about what she meant by “they’re”, FA mentioned several of her group members. She was not able to share about defining SI without talking about the other group members, consistently referring to them as friends.

I reviewed how the participants in the groups FA attended, who were interviewed, defined, and described SI to confirm the key concept of friendship. MD shared, “It [SI] helps to have a better understanding of the content. And it’s not Tutoring, it is basically guidance on the work. It also helps us to socialize. We are friends.” EK shared, “It’s [SI] a place to get help. For me, in ELL classes, my English not so good, so I can say that SI is a place to feel helped by people who understand and are like me.” By reviewing how the participants defined and described SI, I connected the formation of the relationships with how the students felt about their experiences in SI, and all the participants defined and described SI using friendship as a theme. RP shared about how SI supports the learning process and academic help but referred to her classmates and the SI leader in her definition, wrapping up her description with friendship.

> Well, sort of like having a mentor, someone there that we can get help from, where we get help from our classmates and our SI leader. It is what help us to learn more or to do the homework and projects, that it is like a support in our learning process. I think because the way SI is set up, we, I have the opportunity to ask question, maybe question that I have, but maybe I didn’t ask the teacher, and we can share with the with the other classmates and with our SI leader. SI give me the opportunity to ask questions and get answers, give feedback to one another, I think it was great. And I got friends who understand me too.

Many of the participants defined SI as a place to ask questions and discussed SI as a place to feel helped. MD stated, “We all care about each other, we all want to do good,

that is what helps us help each other." KL stated, "… the SI group, we are most surely friends, we want to support each other to do good in class, and we help when we have problems – all problems." The participants' responses began to confirm a culture of caring and the central theme of friendship.

I reviewed the observation data to connect their reported responses with their actions. The observation data outlines the interactions, reinforces their definition of SI, and reveals the care the participants showed for each other. I explain this in more detail when contextualizing the categories and frequency in the observation interactions. Once I had felt I reached saturation with my initial codes, I organized the keywords into phrases that aligned with the concepts in my research questions – how students make meaning of identity, competence, and relationship building through supplemental instruction (see Figure 5).

Figure 5

Concept Map Created to Categorize Keywords into Phrases

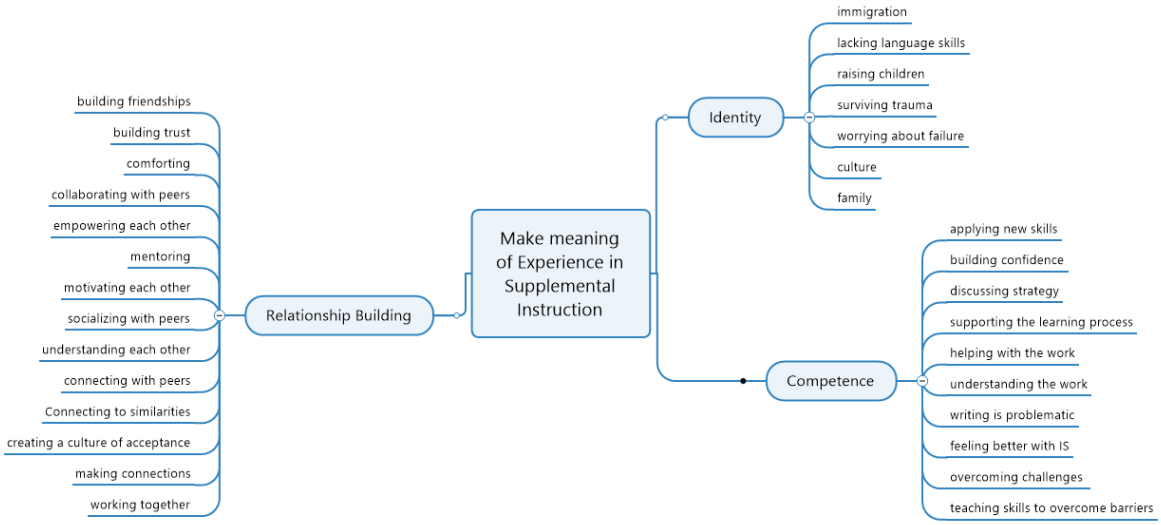


Figure 5 illustrates how I conceptualized the initial keywords identified in my first cycle of coding into gerund phrases that began to align with the three key areas I was exploring – identity, competence, and relationship building, and how these areas related to how students make meaning of their experience in SI. I separated the phrases that correlated with the key concepts, allowing me to analyze the key concepts in my data. Reviewing how the students defined their SI experience and made connections with the concept maps, using a constant comparative method (Charmaz, 2006; Glasser & Strauss, 1999), I was able to begin framing the concepts into emergent themes.

Review of Findings and Emerging Themes

The findings of this study present the connections of how developmental education students, through SI, understand their identity, recognize their competence level, and build relationships. Guided by my interests in holistic supports for student success, drawing from my experience as a social worker and educator, I analyzed the data through a sociological, psychological, cultural, and organizational lens (Duckworth & Yeager, 2015; Kuh et al., 2006, 2007, 2010). Using a grounded theory approach (Charmaz, 2006) to examine the concept of SI as holistic support for student success allowed me to ascertain how students make meaning of their experiences in SI.

The analysis of the data led to the conceptualizing of the emergent themes. After further analysis of the concept maps, review of my memos, and clustering of the codes into gerunds, the final themes emerged: exposes barriers, promotes friendship, problem-solving, encouragement, connection, and working as a team. By reviewing the data and analyzing how the themes connected to the data, I identified the central findings in the study, Supplemental instruction (1) promotes peer-to-peer interaction; (2) facilitates

exposure of impediments (3) builds universality creating a culture of care; (4) facilitates emotional support, creating a culture of care.

In this section, I will outline the emerging themes and connect the themes to the findings. I begin with the coding process and then discuss theoretical sampling, which allowed me to explore the emergent themes further and make solid connections to the findings. This section continues with contextualizing the categories and demonstrating the frequency in the observation interactions, and finally thoroughly explains the emergent themes, which points to the developing theory.

Coding for Emergent Themes

As I embarked on my second coding cycle, I engaged in axial coding, as discussed in Chapter 3. I began to look for categories that emerged from the relationships among the codes I established during my initial coding process (Corbin & Strauss, 2015). I followed the coding paradigm suggested by Corbin and Strauss (2015) and arranged my codes by classifications - phenomenon, causal causation, strategies, consequences, and context. I outlined the codes in a table to analyze my categories, which allowed me to fully explore the emergent themes (Corbin & Strauss, 2015). I started with the concept of phenomenon, or the "what" I intended to explore. I organized the categories as they aligned with the central themes of what I was exploring – identity, competence, and relationship building, to allow my initial categories to emerge from my data (Charmaz, 2006), which I organized in Figure 3. However, as I explored my process and in vivo codes, I narrowed the phenomenon to more explicit categories – exposes barriers, promotes friendship, problem-solving, encouragement, connection, and working as a team (Charmaz, 2006; Corbin & Strauss, 2015).

Next, after I realized the phenomenon in my codes, I reviewed the categories, looking for the causal conditions that addressed what I believed was the "why" the phenomenon happened (Corbin & Strauss, 2015). I then identified strategies and actions aligned with the emergent themes- exposing barriers, promoting friendship, problem-solving, encouragement, connection, and working as a team. Having identified several categories, corresponding causes, and strategies to confirm the emerging themes, I looked for consequences and what outcomes transpired as the participants engaged in the strategy (Corbin & Strauss, 2015). I identified some gap areas throughout the coding and concept mapping process, which became the basis for my theoretical sampling process.

Theoretical Sampling

The coding process led me to some unanswered questions and a need to confirm my emerging themes (Charmaz, 2006). The initial sampling provided a "point of departure" (Charmaz, 2006) but did not provide me with a complete picture of how the participants connected to their identity, competence, and relationship building. Specific to grounded theory research, theoretical sampling guides the researcher "where to go" (Charmaz, 2006). Because of the inductive nature of theory generation, theoretical sampling is guided by the emerging theory and is used to ensure saturation (Charmaz, 2006). To address the areas where I identified gaps, I crafted more complex interview questions (see Appendix C) that aligned with the categories that had emerged.

I reached out to the twelve participants I interviewed; five responded. I met with all five participants and asked the follow-up questions. The questions addressed the identified categories (e.g., exposes barriers, promotes friendship, problem-solving, encouragement, connection, working as a team), for example: "You reported the other

group members were your friends, describe how supplemental instruction helped to develop these friendships" or "During the observations, the members of the group responded with care during emotional crises, tell me about how these interactions helped you to cope with your emotional stressors?" (see Appendix C for a complete list of questions). By addressing these areas and with additional interviews, I was able to target the data and address the gaps. The added data helped me elaborate on my findings and further develop the emerging categories (Charmaz, 2006; Corbin & Strauss, 2015).

Contextualizing the Categories and Frequency in the Observation Interactions

Putting context to the categories also helped me to see frequency. Here is where I returned to my observations to analyze the number of interactions between each participant in the group and with the SI leader. At first, I focused on counting the exchanges. By counting the exchanges, I was able to visualize the encouragement and how each participant engaged and interacted with each other (see Table 3). The counting allowed me to connect the actions in the observations with what the participants reported in their interviews. Once I completed the counting, I returned back to the initial and follow-up interview data to make the connections between the frequency and types of interactions.

Table 3 outlines the number of interactions that occurred during the group sessions and demonstrates the total number of interactions per section. The interactions were recorded in five 10-minute increments during the 50-minute session. I analyzed how the students interacted. Again, first, I concentrated on how many times each participant engaged in an exchange and then examined the content of the interactions related back to

the interview responses. Table 3 displays the total number of recorded interactions to demonstrate the magnitude of interactions throughout the sessions.

Table 3
Participant Interactions During Supplemental Instruction Group Observations

Interactions	1st 10 Minutes	2nd 10 Minutes	3rd 10 Minutes	4th 10 Minutes	5th 10 Minutes	*Total*
	n	*n*	*n*	*n*	*n*	*n*
Students with Students	6	28	42	48	38	162
Students encouraged each other	2	13	27	23	36	101
Students with SI Leader	25	20	16	10	17	88
Students asked questions	13	21	50	49	11	144
Asked questions to SI leader	4	9	8	11	5	37
Asked questions to each other	9	12	42	38	6	107

Note. N=12 participants (*n*= the number of interactions between the participants in the group session.)

The following sections explain and contextualize the interactions between the participants and how they were observed.

Students with Students

The interactions among students were conversational and aligned with both academic work and emotional support. The initial 10 minutes included greetings and salutations and then moved to more significant conversations. These interactions included discussions about both academic and emotional impediments to success. While much of the time in the second, third, and fourth 10-minute increments was spent covering the course content, many of the interactions included discussion related to feelings, competence, ability, and skill-building. The following displays examples that relate to these types of interaction.

Table 4

Interactions Related to Feelings, Competence, Ability, and Skill-Building

Type of Interaction	Example
Feelings	RQ to MD, "You seem upset, what's wrong?" MD to RQ, "This week has been too hard. I know I know this [course material], but it just really hard now. Not the work, doing it with everything that is at home, it makes me feel like I not capable to be a student." RQ to M, "So sorry, I know things with me are too hard as well but coming here with our friends helps. Can I help you?"
Competence	KL to Group, "WOW, thank you guys. I finally get it, I proud of me but because all you help me so much."
Ability	TR to group, "The suggestion you gave me last week… I was able to concentrate on studying for the test… I got an A."

Type of Interaction	Example
Skill-Building	LB to group, "How do I show how to put competency 6 into practice? That is what we say, practice, right?" RP to LB, "Yes practice…I learned that competence 6 is about working with families…."

The *student-to-student* interactions also illustrated how the participants understood each other, identified with each other, and how they showed concern for each other. The following chat provides examples of the care demonstrated. For example, the group identified that KL was quiet and not herself,

> DC asked, KL, what's going on with you, you so quiet, you never quiet?
>
> KL shared to the Group, Sorry everyone, I having a bad day.
>
> DC replied, You no need to apologize, how can we help?
>
> Group Member all replied, Yeah, let us help – tell us why you so upset – yeah, we here for you.
>
> KL responded to the Group, I have to go to immigration tomorrow. My appointment is same time as our test. I'm scared to miss any of them.
>
> RQ suggested, Talk to the professor, she really nice, tell her why, she understands. I had the same issue, and when I had to go to an appointment for my papers, she let me make up my work, and was so nice about it.

Group responded, she does – totally – yeah, talk to her.

KL thanked the group and shared that she felt better. This show of concern also demonstrated the connectedness the students felt with each other. Another example that demonstrated concern identified as a *student-to-student* interaction came from FA to the Group,

> FA shared, Guys, I keep my camera off today. I no feel well.
>
> RP replied to FA, You ok?
>
> FA answered, No, but it ok. We just work.
>
> EK interjected, Oh no, we here to help each one, how can we help you? You our friend.
>
> RP responded, Yes, you are our friend, we all have bad days, I have many. We are here for you.

The notion of friendship became evident in these interactions. When reviewing how the participants defined friendship, they used the term care. The interactions with KL and FA support the emotional connection of well-being and caring for each other.

After reviewing this section of the observations, I returned to the interview transcripts and focused on how the participants answered the questions related to feeling helped and showing concern to confirm the notion of care and well-being further. Reviewing these answers helped contextualize the interactions and connect to what the participants reported during the interviews and their actions in the group sessions. SR expresses care, friendship, and connectivity, as she shared,

> We still have opportunity; we can help each other, we can talk to each other and get help and how to get help from other students.

> And you know, even when I know something I can share with my peers and when, they know something that can help me, they share it. Even things that are not in class, like we are friends. Just yesterday, one of my peers doesn't know how to register for the next semester, so I tell her how to do it. And that because someone showed me once, now I can help.

The culture of showing care was evident in emotional care but also how the participants felt about their level of competence. GP shared,

> And sometimes, I do not understand, and something is difficult to understand, I need to be explained what is saying, and mostly my friends in the group, they help me most. I feel better after because then I understand and don't feel bad or not smart.

The participants' sharing demonstrated how they cared for each other and exhibited relationship building when interacting with each other. They connected with each other and placed value on their interactions. The SI sessions provided opportunities for them to share their experiences and the participants provided emotional support to each other. The interactions became an opportunity to give to each other, creating positive feelings and a sense of connection and identification. Their display of care and kindness indicates the importance of well-being.

A sense of emotional well-being became evident. The participants helped each other cope with their academic struggles, but this was not without supporting the emotional struggles. They reflected on how they positively felt about each other and how each one felt helped and supported. They made statements such as, "I so thankful for you

all, you help me so much," and "…this makes me feel so support, so much support, and you all are so wonderful, thank you," and "You got this… you are so smart, don't let anyone tell you anything else." The social interaction created a sense of belonging and social inclusion. The way they communicated with each other created the universality (Yalom, 2005) that augmented their well-being, which led to intellectual wellness. Accounts such as, "I feel so confident because of your help," and "It is now better, I get it, I know that I will feel better giving the presentation…" illustrates intellectual wellness. During the second set of interviews, I addressed this area to confirm the notion of well-being. When asked about feeling confident because of being helped and how the group helped each other to "feel better," the responses aligned with the interactions in the group. EK shared, "The way we talk to each other, the way we interact, even though it on Zoom, we just always end up feeling better than we started." Similarly, BC shared,

> It's because we friends, we become friends in the group [SI] and we care about how we each do in class, we want to all do well so we all help each other… and that feels really, really good…it even makes me feel smart, and I don't always feel smart or be able to be a teacher sometimes, but when in the group, working with my friends, I feel smart and better.

The intellectual wellness provided them with the ability to develop their skills and meet a sense of accomplishment, which is further demonstrated in the next section of *students-encouraged-each-other.*

Students Encouraged Each Other

Subsequent to reviewing the *students-with-students* interactions, I returned to the transcripts to analyze the types of interactions and examined if these interactions aligned with the themes I identified – exposes barriers, promotes friendship, problem-solving, encouragement, connection, and working as a team. The review of the exchanges also helped to emphasize the importance of care among the participants and how that caring behavior helped to highlight emotional and intellectual wellness.

The initial 10-minute segment had little interaction (two students said encouraging things in response to the SI leader discussing that weeks' lesson). However, as the group moved through the session, the encouragement increased. In the second 10-minute increment, I found that the participants used language that was a more motivating encouragement. For example, TR stated, "Let's get this done so we can feel good about our work." TR's statement prompted SR, she shared, "I know we can all pass this test, we study good." This interaction provoked more encouraging responses, DC exclaimed, "We got this!" and LB shared in response to DC, "I know our presentation [test] be great, like SR said, we study good." Other sessions included similar interactions that denoted motivating encouragement, statements such as, "…you motivate me to do better… "…you can do this, I know you can, I see how hard you work…" and "…we are going to rock this presentation…because we all work so hard… we got this." The encouragement continued throughout the sessions. However, encouragement in the third 10-minute segment increased significantly, with 14 more interactions overall than the second segment. The interactions were more frequent, started to become more meaningful, and

were often directed to specific participants. The following demonstrates examples of interactions that reveals emotional encouragement.

Table 5

Interactions That Reveal Emotional Encouragement

Participants	Interaction
KL shared to LB	"LB, you so smart, I really like how you put those slides together – your work is inspiring me to do better, thank you."
NN shared to TR	"TR, don't feel worried, you are doing great job here, we all like your work."
SR shared to EK	"Your explanation of the competencies is powerful. I really like how you do it – I want to learn to do your way."

These interactions continue to support students encouraging each other and connect to the care they showed for each other. The third 10-minute segment seemed to move more towards demonstrating problem-solving with encouragement. For example,

> FA shared to the group, What do you all think about this way of completing the competencies? I really like all the ones everyone did, but not sure about mine. Anyone make me suggestions?
>
> RP replied to FA, I like you doing, but maybe consider putting more information [student discusses the types of information to

add] in slides. That may help give you feelings of confident when you present.

EK also replied to FA, Yes, yes, I agree with RP. You do good, but maybe make those changes. Also, maybe add pictures to your slides, that help to see what you talking on.

FA responded to both RP and EK, Thank you, you, so helpful, what would I do without working with you. I feel happier.

Encouragement decreased slightly in the fourth 10-minute segment but increased towards the end of the session. These interactions seemed to be encouraging words for the group members to take with them for the week, for example, TR shared, "Great job gang, we really did good today, keep it up all week" and LB shared, "That was amazing today, I learn so much from all you, we did great, let's do great in class tomorrow." The encouragement provided both reassurance and inspiration to the group members and was not without emotional encouragement.

There was emotional reassurance throughout all five 10-minute segments. For instance, RP shared to the group, "I missed class yesterday, I feel so bad, but my family needed me…I could not say no to them, they don't understand me in school," and the group responded to her with affirmations of care and concern, "I hope you ok RP, tell me if you need anything," "We always here for you, don't worry about class, we talk about it here." Other group members asked if she would like to talk about what happened, and TR shared, "My family do not understand either, sometimes I have to lie to them about what I doing, they say things like, you no need school, you just need to take care of the family." They connected over their personal struggles and their academic struggles. All

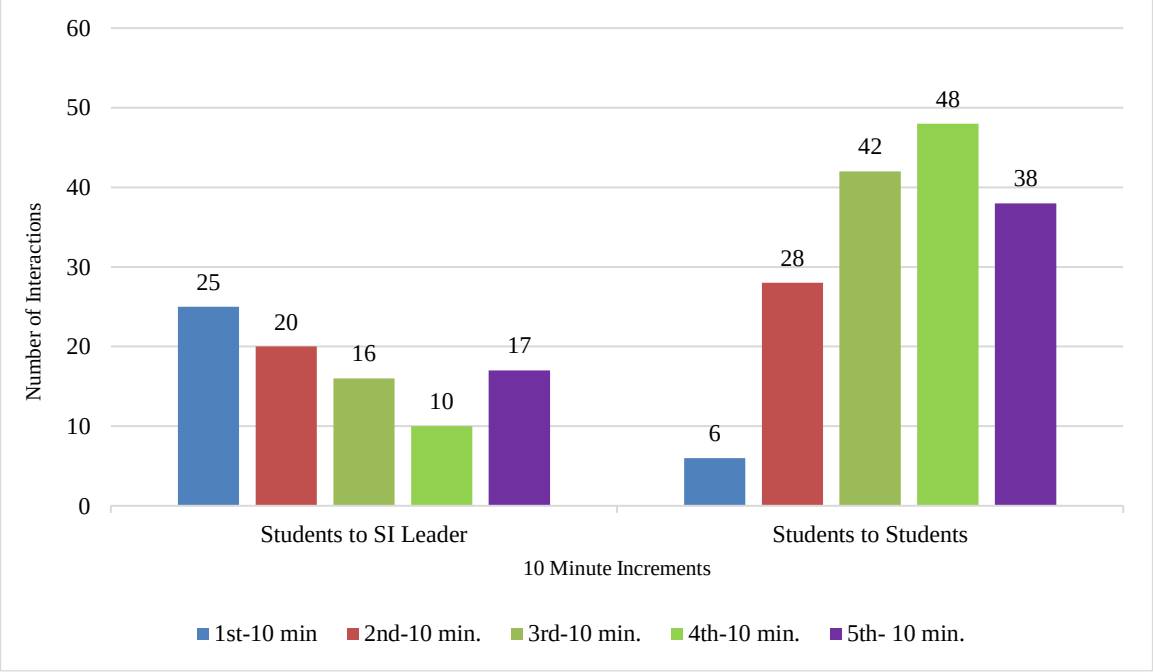
the encouragement, regardless of the reason, demonstrated care among the participants and reinforced the concept of relationship building.

Students with SI Leaders

There were significantly more interactions with the SI leaders in the first 10-minute segment than there were between the students (see Figure 5). Figure 5 demonstrates the number of interactions between the students and the SI leader and the students and each other.

Figure 6

Participant Interactions During Supplemental Instruction Group Observations



Note. There is no significance to the colors, and the colors are solely to emphasize the differences in the interactions and time frames.

Figure 6 clearly illustrates the decrease in the interactions between the students and SI leaders [number of interactions for the five 10-minute segments: 25, 20, 16, 10,17] as the session goes on, and increases between the students and each other [number of interactions for the five 10-minute segments: 6, 28, 42, 48, 38]. The initial interactions were greetings and setting up the session. The interactions between the students and the SI leaders were more academically charged and transactional than conversational. The SI leaders would begin the sessions asking for questions about the class that week, a few students would share about what happened in class or ask about assignment questions; for example, NN asked, "We went over some competencies again this week, I think I understand but can you explain competency 4?" and MD asked, "Can you review competency 5, I struggle with this one." These types of questions were typical, especially in the first 10-minute segment.

As the communication between the students and SI leaders continued through the session, the interactions consisted mainly of the students asking questions related to academic work. For example, EK asked a logistical question to confirm she knew what was required of the assignment, "Professor, [addressing the SI leader], how many slides we need for the presentation?" However, LB asked a question related to the assignment but with concern for her work, "What happens if our partner [for presentation] is absent?" Similarly, to NN's question about explaining the class lecture, there were also questions that aligned with competence; TR asked, "Is it has to or have to [asking for correction in language]?" These types of questions occurred throughout each observation and

are further explained in the *students-ask-questions* section. However, once the students began to interact with each other in the group, while their interactions were academic, they very often veered off the lesson or academics and focused on personal issues. The SI leaders would allow these interactions and often stayed quiet during the personal conversations, only minimally participating. This behavior seemed to demonstrate the relationship building between the students and the students more than with the SI leader.

Figure 6 provides a visual to understand the difference in the number of interactions; however, to differentiate between the types of interactions and provide meaning to the interactions, I returned to the interview transcripts to assess how the participants described their interactions with the leaders. While the students identified their peers as the most significant influencers, all 12 of the interviewees attributed their success as students and their ability to grasp the academic concepts to the SI leader.

The participants commented, such as FA, who stated, "She [SI leader] so helpful, I understand what I need to know for the test because of how she explain things." SR commented, "I couldn't do well in class without her [SI leader] help, she makes everything so easy to understand that when we study for the test, I just know the information." Other comments related to how the SI leader helped with success as a student were, "I would not be passing with a good grade if I didn't get help from her [SI Leader]" or "The material is hard, but she [SI leader] helps me understand so I pass." KL shared, "She [SI leader] makes the material so understandable, but she also let us [the group] work with each other and help each other." I questioned KL as to what she meant by "letting" the participants work with each other and help each other, she replied,

> …she is like in charge of the group, she teaches us and reviews the material, and then let's us work, I guess you say she lets us work and is there for questions or if we need more help than we give each other.
>
> While there were significantly more interactions between the students and the students then between the students and the SI leader, the participants attributed the facilitation of the material and the process of interaction with each other to the SI leader. This demonstrates fostering peer-to-peer interaction and shows that providing a place for peers to work together promotes students' engagement and success.

It is important to note that eight of the interviewees also contributed their success to the professor. EK shared, "My SI leader is wonderful, but so is my professor. She [professor] is so helpful, she explains me the information so nicely that I always understand." Additionally, RP shared, "Professor C, she care so much about how we learn, she explains things so simply that even though my English not so good, I understand and I do well on the homework." They reported all three, their peers, the SI leader, and the professor were helpful during their time in SI; however, they viewed their interactions differently.

For example, the professor was described as understanding and supportive of their needs as a student, MD shared, "Professor P, she is so patient with me, I don't always understand the work, because my language…she takes her time and will repeat things over and over for me." AD shared a similar feeling, "I feel lucky to have Professor C, she

is so nice…she stays after class a lot to answer my questions because sometimes I get embarrassed to ask questions in class…she understand my English not so good." The SI leader was described as influential and motivating, RP stated, "…the SI leader, she make such a difference in my life, she help me so much, I would not be able to do college-level without her." SR shared, "H [SI leader], she is amazing, really truly wonderful, I do well in the class because of everything she teach us…don't tell Professor P but I think "H" is a better teacher [laughter]." Finally, the participants described the other students in the session as friends and a support system, the participants made comments such as, "The students in the group… they are my friends," "My best friends," "I trust the group so much, they treat me like friend," "We are friends, we all friends". These descriptions helped me to see how all these actors [SI leaders, peers, and Professors] are instrumental in relationship and competence building. However, during the interviews, the participants emphasized their peers were the most instrumental in their academic and emotional success but did reflect that the SI leaders were extremely helpful academically.

Several participants referred to the SI leader as a person who showed concern and care for their learning. RP shared, "My SI leader, she is always there for us, she gives us her number and tells us to call her anytime we have questions." BC shared, "She [SI leader] cares, she cares about me learning the material, but she always ask if I need anything, not just for study." However, it is important to mention that ten of the twelve interviewees referred to the SI leader as a professor. MD stated, "The professor is so helpful… yes, I mean the leader of our group…oh yes, she is a student, but she teaches us… so I call her professor." EK shared a similar sentiment and also discussed why she refers to the SI leader as professor, "I know she [SI leader] a student, but respectfully

because she run the group, I call her professor." When asked, the participants acknowledged the SI leader as a student but saw the SI leader as a person of authority, a teacher, not typically a peer.

Only two students referred to the SI leaders as friends, identifying them as friends from other classes. NN shared, "My SI leader help me so much, we are friends. We took ELL classes together and now she a leader, she inspire me." When asked about the relationship with the SI leader, AD stated,

> The other students in the group, they are the most caring, but my SI leader she is very caring. My professor too. My SI leader, I call her friend, she helps me so much, I know her for a long time. We started school at the same time, she just better at ELL classes than me.

Regardless of how the participants referred to the SI leader, friend, or professor, all believed the leaders were instrumental in helping them succeed, trusted the leader, and believed the SI leader cared for them.

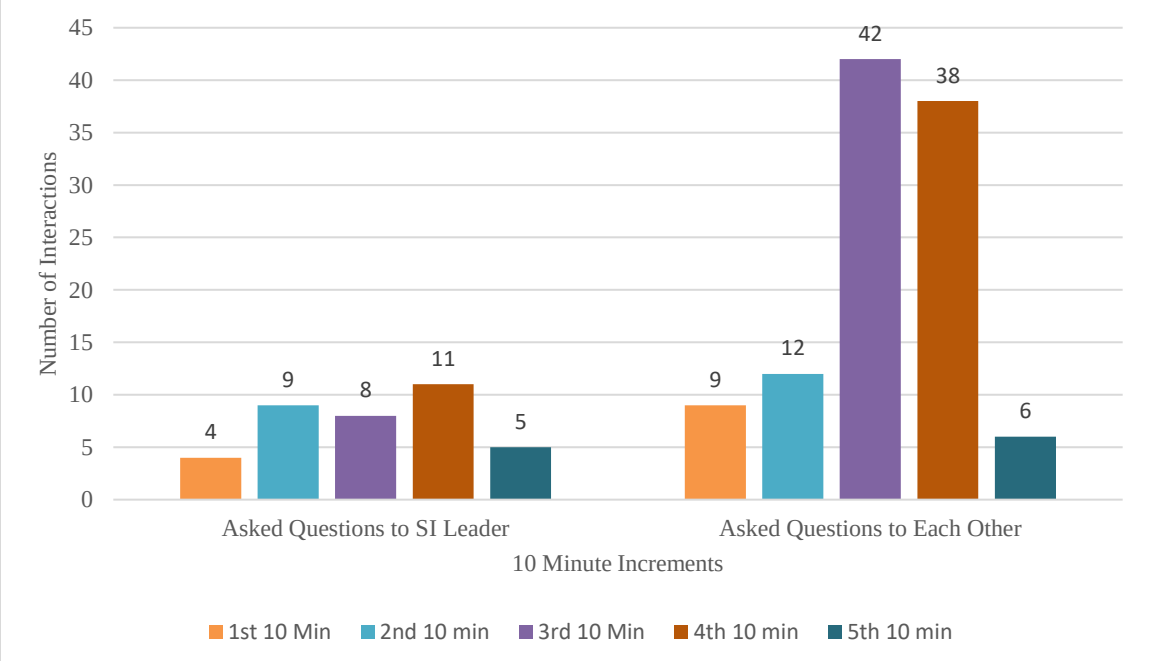
Students Asked Questions

Initially, the last observation category was – *students asked questions*. However, while listening to the transcripts of the observations, I split up the category, creating two categories - *asked questions to the SI leader* and *asked questions to each other* - to identify the difference between students asking questions to each other versus the SI leader. I discovered this was an area to note as the students turned to each other for questions significantly more than the SI leader (see Figure 6). Figure 6 shows the interactions and notes the significant difference between asking questions to the SI leader

versus asking each other. In the first 10-minutes, the students asked nine questions to each other as opposed to four questions to the SI leader. Throughout the session, I saw an increase of questioning in both areas, but the students' questions to each other significantly increased, especially in the third and fourth 10-minute segments (see Figure 6). During this time frame, students appeared more focused on each other when doing the work than on the SI leaders.

Figure 7

Students Asked Questions During Observations



Note. There is no significance to the colors, and the colors are solely to emphasize the differences in the interactions and time frames.

When asking questions to each other the participants demonstrated working as a team and problem solving, not only about the course work but helping each other to work through personal issues that seemed to cause a barrier to their academic work. They would begin asking each other questions about their course work but would veer off topic, leading to conversations about personal obstacles. The following is a conversation that occurred in one session,

> SM asked, When the professor said we had to make sure the competencies were outlined, what does she mean? I just don't get it, I am so frustrated.
>
> SR responded to SM, I too frustrated, I understand in class, and then I get home and my mind go blank, I don't know anything.
>
> KL interjected, That happen to me too, especially since my house is so chaotic, I can't think straight.
>
> SM returned a sentiment, My house is chaotic too, everyone home, there are not enough computers for everyone, I want to buy another one for my daughter, but my husband said we can't afford to, so we share, and I feel bad when I need to it [the computer] take away from her.
>
> RQ shared, I no have internet, we couldn't afford the bill, so it cut off, now I am trying to borrow the internet from the store downstairs, sometimes it works, sometimes it doesn't, so

> frustrating. I feel like I not getting to get my work done a lot, I feel like a bad student.
>
> KL continued, Oh, that terrible RQ and SM, I have internet and a computer, but my family not understand how important school is, they make me feel bad about studying, I just want to quit sometimes.
>
> RQ stated, I want to quit all the time. I no feel good at this, I want to be a teacher, but who is going to learn from me, I can't even learn, what do I do?

This conversation was indicative of many conversations that began with students asking questions. Like the family and financial issues discussed here, their environmental stressors seemed to affect their well-being both emotionally and intellectually. During the second round of interviews, I asked RQ about this conversation focusing on her statements, "I feel like a bad student," and "…who is going to learn from me?" She expressed distress and connected her stress to her academic abilities and shared,

> …there so much stress at home, I don't know if I ever feel good about school. I want to, I want to be a teacher, but sometimes everything so stressful, and I not feel capable of learning, or learning what I need to...I try not complain, but it just gets to me.

RQ related to the stress at home and connected her anxiety to her competence level. I asked her if anything helps her to feel better about herself as a student, she replied, "my friends in group [SI], and my SI leader too, she so helpful and cares

so much about us, even though she no say too much when we talking, she is always there for us."

As discussed in the *Students with SI Leaders* section, this is the time when the SI leaders would often remain quiet and let the students interact with each other. Allowing the students to interact with each other, seemed to facilitate both relationship and competence building. The students asked each other questions that related to the course work, such as, "SR did you understand what Professor C meant in class…" or "Hey guys, how are you showing competency 3 in your portfolio?" There were also questions of concern, for instance, "DC, do you feel better?" or "KL, how did your appointment for your papers [immigration] go? All ok?" These questions relate to the notion of care and concern through peer-to-peer interaction and demonstrate the connections built in SI among the group members.

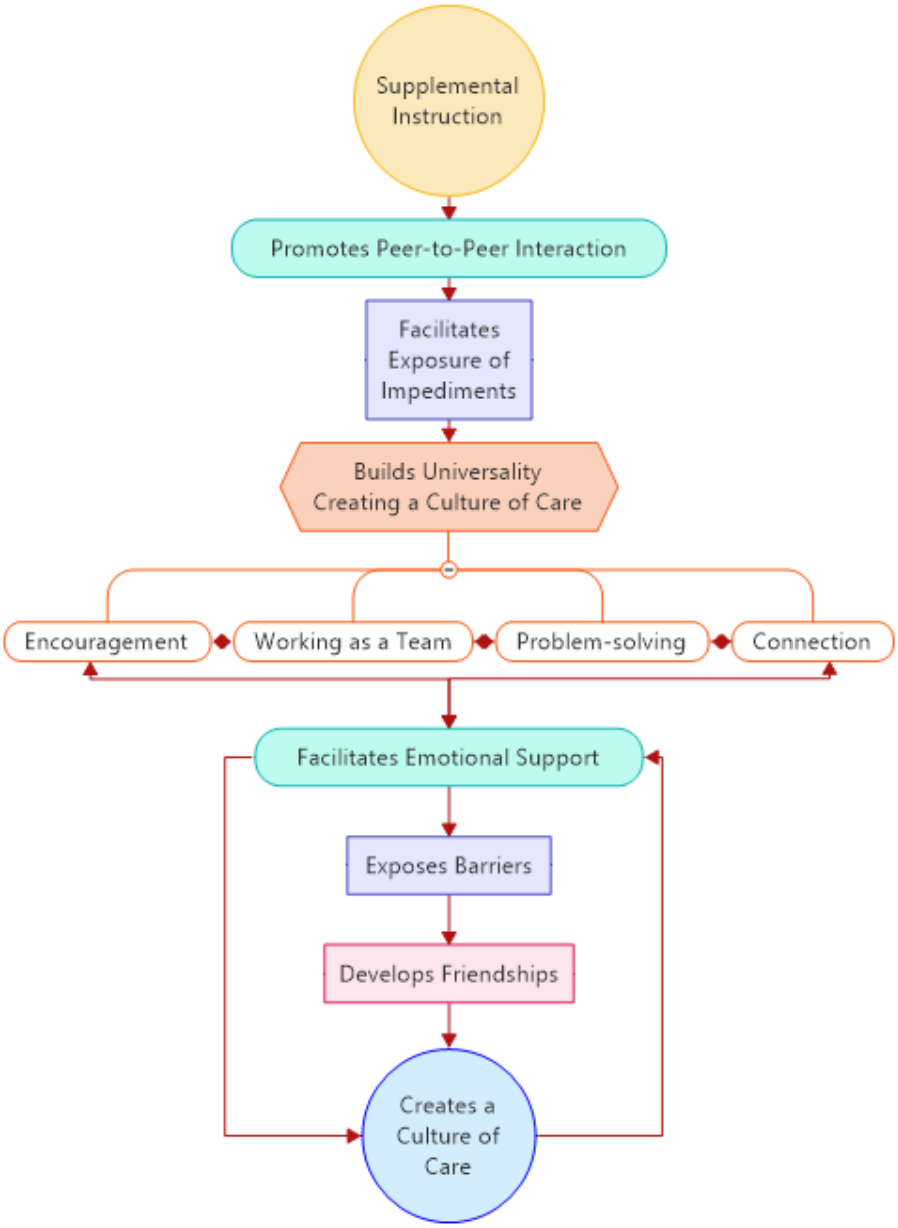
It is also important to note that the questions directed to the SI leader were more logistical and seeking information. In contrast, the questions the participants asked each other offered a more concerning tone. An example of a question asked to the SI leader was, "When I do my presentation, will the professor take off points if I don't say a word the right way?" verses a question asked among the peers, "How do you feel that we practiced our presentation, better and not so more nervous?" The culture of care continued throughout the sessions as the participants recognized each other's barriers, facilitating emotional support and relationship building.

Relationship of the Emergent Themes to The Supplemental Instruction Culture of Care Model

The following summarizes the six emergent themes – exposes barriers, promotes friendship, problem-solving, encouragement, connection, and working as a team and connects these themes to *The Supplemental Instruction Culture of Care Model*, the central findings in the study: Supplemental instruction (1) promotes peer-to-peer interaction; (2) facilitates exposure of impediments (3) builds universality creating a culture of care; (4) facilitates emotional support, creating a culture of care. I have presented excerpts and descriptions from the interviews and observations for each theme, contextualizing the developing phenomenon. Each theme delineates the data from the interviews and observations, reflecting on the number and types of interactions, coupled with the information reported directly from the participants during the interviews. The themes are organized as they are integrated into the model and discussed as to how they emerged from the data, keeping in line with the reflective process in grounded theory research (Charmaz, 2006; Corbin & Strauss, 2015). The themes provide the groundwork for the intersections of SI across identity, competence, and relationship building with developmental education students.

Figure 8

The Supplemental Instruction Culture of Care Model



The Grounded Theory

Supplemental instruction promotes peer-to-peer interactions in an academic setting. Although designed as an approach to focus exclusively on academic material, the initial interactions naturally facilitate the exposure of the students' impediments. The exposure allows for vulnerability and fosters caring reactions and responses, creating a culture of care. The continuous support through the peer-to-peer exchanges enables relationships, typically through identification, as the students realize they share the same barriers to learning and similar environmental and emotional issues. They form connections and provide encouragement through working as a team and problem-solving. Their teamwork and problem solving expand beyond academic work, facilitating emotional support for their language barriers, family and cultural issues, (un)employment, and trauma. As these barriers are exposed through their relationship building, friendships are developed. The emotional support facilitated by the continued peer-to-peer interactions is fluid, demonstrating how the students influence each other, creating a culture of care.

Exposes Barriers

Barriers emerged at the onset of my initial coding and continued as a central theme throughout the coding process. During the interview process, each participant was asked directly about their struggles and what in their lives shaped their struggles. All the participants reported issues with their language, and eleven of the interviewees discussed environmental and emotional issues in addition to their language. They specifically identified areas that related to immigration, raising children, domestic violence, surviving trauma, work, challenging home environment, worrying about failure, family needs, and

culture. When I returned to the five interviewees for follow-up questions, I focused on these emergent areas to further confirm how participating in SI exposed barriers. I learned that these students described their barriers by making statements such as,

> My language is bad, it makes it hard for me to understand. (RP)
>
> My husband says going to school is good for me, but he also gets mad when I study, and some of the house chores aren't good. (BC)
>
> I came to US because my country was at War [Syria], and I left many of my family there, I worry all the time. (SR)
>
> My family doesn't support me, sometimes I have to lie just to go to class because they think I not taking care of my family, it is so upsetting. (TR)
>
> My English not too good, and I am always scared I will fail, (EK)
>
> First, work always in the way, now I'm unemployed because of the pandemic, and not having money makes me worry. (FA)
>
> I survived a domestic violence relationship, I left my husband because he put me in the hospital, he always said I would never be anything, I want to prove that isn't true. (MD)

I sought to understand the barriers the participants reported and examined the data to make connections on how the barriers exposed thwarted their success as a student. The discourse in the observations and the reports in the interviews consistently identified emotional, social, and psychological issues and often connected these issues to the language barriers and academic competence. Conversely, while the participants reported lacking language skills as their most significant barrier, their personal issues (e.g.,

immigration, loss, trauma, culture, family) created the emotional strife that challenged their learning process. Their language skills seemed to be the obvious issue for them, and they are constantly reminded of their language inabilities as they face multiple semesters at the developmental level. With little to no emphasis placed on emotional, psychological, or financial benchmarks when determining student success (Sigillo, 2018), the initial identity development that occurred for these students was their lack of language skills.

Identity

Environmental and Emotional Barriers Affect Student Well-Being

When asked about the other issues in their life they reported (e.g., immigration, trauma, culture), they identified these areas as life issues they were "just dealing with." KL stated, "Yes, not having my papers [immigration status] makes me anxious, and sometimes get in the way of my studies, my anxiety, but my language makes me feel not smart, not my papers." AD stated, "The things I deal with, my struggles you asked, they my problem, right? Like I always been told, that's not my teacher's problem, it's mine to deal with." Similarly, when asked about struggles as a student, EK stated, "I feel so stress trying to keep up with my school and my family, my husband, he does not really understand when I cannot take care of the kids, but I handle it because what else I do?" These areas seemed to be secondary issues for the participants but did connect the emotional barriers to their intellectual well-being. When discussing emotional issues, they clearly expressed distress that seemed to affect their total well-being.

Ninety-seven of the interactions during the observations demonstrated how the students shared their personal stories. Their stories illustrated identification and care. The following shows instances that occurred during the observations:

DC and KL exchanged a story about coming to the US and their language,

DC shared, When I came to this country, I speak no English. Coming here made be worry so much about how I would support my family. I not sure what would happen.

KL responded, Me too. Coming to the US was scary, I did not want to leave my country because even though things are bad there, we work and have money. We come here, and I not know how I would work.

DC replied, Coming to school and taking ELL classes help so much, I never thought I would speak. But now that I speak English, I still struggle but I am able to keep going.

KL shared, Yes, yes, me too. I keep going, even though I do not think my English good enough. And I even have job and so do my husband. We work and support our family. But I really want to be a teacher. I was a teacher in my country and I want to be one here.

TR shared a story about losing a family member to COVID, and SR identified,

TR shared, This virus, you know is so scary. My uncle died last week, and we can't even go to the funeral.

SR responded, I know how you feel, my grandmother died last week – she had the Corona, it was really bad, I shared in group last week when she die, I was so sad.

TR replied, Oh SR, I sorry for you.

SR stated, I sorry for you too TR, we just need to stick together and support each other.

RQ shared an exchange with MD about domestic violence,

RQ shared, MD, I so impressed with your story and how you come back to school. I grew up with my father always hurting my momma, and sometimes us too. I wish my momma left him. She stay with him until he die.

MD replied, It was hard to leave, but now I have my life. I still scared, I bet you were scared too.

RQ stated, Scared all the time, scared my momma was not going to wake up sometimes when he hit her, but she good now. Like you, you look good now. Are you good?

By identifying with each other, the participants demonstrated how they leaned on each other for support. In addition to the emotional support, they provided each other with suggestions that helped them work through their issues in order to continue with their studies. From the interaction in the chat above, and example of how emotional support connected to academic support is shown when MD responded to RQ, “I am good now. School helps me a lot. Sometimes I don’t understand everything, and I get anxious, but I work on it. RQ responded, “What are some things you don’t understand, maybe I can help you, if not, the group can.” Group members joined in, “We can” - “What are you working on” – “How we help you, what you need?”

When asked directly, the interviewees reported that these areas often caused them to worry about academic failure and created a hesitancy to continue with school. When interviewed, DC shared, “I am always worried that I will fail. I don’t know, and I want to quit.” When asked why she stays, DC responded, “I afraid to disappoint people, my family, my friends, they all say I can do it, but I not always believe that they are right.” FA shared similar feelings, she stated, “I worry if can be a good teacher. I think about leaving school and forgetting about this, but I really want to be a teacher, I just worry if I will be good enough.” These statements are examples of how the participants experienced feelings of worry and lack of confidence, made them feel overwhelmed, and frequently caused them to contemplate dropping out. Two of the interviewees reported they did drop out but were able to return and identified SI as a support that keeps them enrolled. NN shared, “I look forward to the sessions in the week, it is what makes me feel less stress.” Similarly, KL stated, “It [SI session] is the best part of my week, I see my friends, and they make me feel happy.” These reports helped to confirm what was happing during the observations, as the barriers emerged organically.

Language Barriers and Identity

All the students discussed their struggles with language, and many apologized for their lack of language skills. Several of the participants described their understanding of the English language as their most significant barrier to learning. They identified themselves as “ELL” students and centered their identity on language. The participants reported their insecurities in language skills as an obstruction to academic success. They shared statements in the observations such as, “I never going to understand these words,” and “…I don’t know, my language, my language make it so hard for me to understand.” When confronted by the SI leader or peers with counteracting statements like, “…but

your English is fine, we understand you perfectly…" and "I know English is hard, but you do so well, you speak so well," the rebuttal was, "yes, I speak, but understanding is so hard, I feel like I don't belong here and I not going to make a good teacher, I feel I not ever going to understand." These statements reinforce the idea that the students attach to their language barriers and shows how their identity is attached to their perceived poor language skills and affects their competence.

It should be noted that all students spoke English fluently but appeared to struggle with feeling secure about their language. I did explore this behavior with several participants and learned that the SI leaders were a tremendous support in helping to overcome the insecurity of language. The participants made statements such as, "She [SI leader] help me so much, she speaks Spanish and helps me with my words," and "Our leader, she speak Arabic, and she will say the lesson in both English and Arabic, so we understand, that makes me feel better." In addition to the statements of support regarding their language barriers, the participants shared being motivated and inspired by the SI leaders, for example, "Knowing she [SI leader] was also an ELL student helps to keep me going," and "She [SI leader] cheers me on and tells me all the time how she learned the language so good, so I believe I can." While the participants did discuss the other barriers as struggles to their academic journey, they seemed to focus on their language skills as an impediment to their competence levels.

Competence

Self-Esteem and Perceived Abilities to Complete Academic Work

Seven of the 12 interviewees reported the SI leader was instrumental in teaching them skills to overcome their academic obstacles, specifically language skills. They made statements such as, "B [SI leader] is so helpful, she understands that my language not so

good and helps me with words" and "When I feel bad about myself, and I want to quit, H [SI leader], she offers help and tells me about her problems…it makes me feel like I am going to be ok in school." I observed both the SI leader and the participants helping each other with language issues. Nine out of the twelve interviewees reported they felt more confident in their work after working within the SI group. GP shared, "I always feel better, the group is so helpful, even though I don't go all the time, when I go, I know I am going to feel better about my work, and me too, you know, more sure of myself." Other participants made similar statements such as, "The group…it makes me feel like a rock star, that I can do anything," and "I always doubt myself… my family doubt me too… but the group, they make me feel like I going to be a good teacher." Motivation was also a factor in how self-esteem and competence connected. Eight of the 12 interviewees reported their motivation to learn increased. Six of these participants reported that help with their language barriers provided them with the most motivation to learn. It is important to note that the majority of the participants identified language barriers as obstacles to both academic studies and personal interactions.

Nine of the 12 interviewees reported sharing resources to work through difficulties with coursework. Ten of the 12 interviewees reported working together to check each other's work before submitting it. Twelve of the 12 interviewees reported that their peers in the group were the most influential in working to overcome personal barriers, specifically cultural (including language), family, trauma, and immigration issues. The participants always circled back to how they felt, connecting their identity to their competence.

Working Together as a Team

Two-hundred-thirty of the 370 interactions (see Table 2) between the participants were identified as collaborations. The participants read out loud to each other as they reviewed the material presented by the SI leaders. They practiced presentations, analyzed the assignments, and reviewed the material together by sharing ideas about how to tackle the material. The SI leaders inserted themselves in the conversations, but more often than not, acted as a guide, sitting back and allowing the students to work with each other.

Relationship Connections and Encouragement Influence Behavior

Working as a group demonstrated universality (Yalom, 2005) and created a sense of intimacy (Chickering & Reisser, 1993) among the participants. Working in groups provided the students with an understanding of their collective ideals and created opportunities for them to socialize with each other—the group work promoted hope among the participants as they worked together as a team. Encouragement was displayed as the participants acknowledged each other's successes and verbalized their struggles and barriers. The participants showed their identification with endearing language such as, – "I struggle with that too" (NN)– "I am just like you, and you just like me," (FA)– "We all have bad day, I know how hard it is with the kids" (BC)– "My husband don't always understand either" (TR).

The participant's associated motivating influence with identification. While the participants interacted with each other more than with the SI leader, seven of the 12 interviewees reported the SI leaders were a strong motivating influence. The group's universality (Yalom, 2005) was evident in the observations, among both the *students-to-students* and *students-to-SI leaders*. At several points during the SI sessions, all three SI leaders shared their journey through developmental education and ELS courses. Sharing

these stories prompted responses such as, “Wow, listen to you, I feel I can do this,” and “Your story help me to feel like I going to get better at this work.” Motivation continued throughout each session, which appeared to influence the participants’ thoughts to keep going and helped create a culture in the group where they bonded and looked out for each other.

Working as a team did not always align with academics. More than half of the 230 interactions were related to areas that aligned with the participants comforting each other in areas unrelated to the academic work. The following is an example conversation that demonstrates working as a team and addressing emotional issues with encouragement.

> AD confronted SR, SR, are you there [camera off]? I hear nothing from you today.
>
> SR replied, Yea, I am here. Just not feeling good today.
>
> MD interjected, Do you need anything?
>
> Group members shared simultaneously, Yes – yes- do you need anything? What’s wrong?
>
> SR responded, My grandmother died yesterday – she got the Corona, and it was bad.
>
> Group members reacted, Oh no – so sorry – what do you need? – how can we do [help] for you? – so sorry – this terrible, what do you need?
>
> SR stated, [crying] I don’t know, I am so sad, I loved her so much, she raised me, she was really my mother.

MD responded, I am sorry for your loss. Please take care of yourself. Let me know or tell the group what we can do to help you.

FA also responded, Yes, make sure to eat and drink, you have to have your strength.

LB identified, My sister-in-law pass away a few months ago from COVID, I know your sadness. I just try to stay positive and stay strong for my family.

Conversations such as these often happened in the SI sessions. These types of interactions influenced a culture of care, connecting their relationships with encouragement and identification.

Problem-Solving

There were 269 interactions during my observations (see Table 2) where the participants interacted with each other and asked each other questions that corresponded with problem-solving. Eleven of the 12 interviewees reported that their peers had the most significant impact on their problem-solving, and the participants shared working together and learning to apply new skills. Both the interviews and observations revealed that problem-solving related to both academic and personal barriers (see Figure 1.2 for identified barriers).

Peer Driven Academic Support Services Facilitate Emotional Support and Relationship Building

The key points that formulated the problem-solving theme aligned with how the participants discussed their working together, how they applied new skills learned, and how they taught each other skills to overcome their learning barriers. Both the

interactions between the students and the SI leader revealed how the students felt about their skill level and competence. However, the peer-to-peer interactions facilitated emotional support, which aligned with relationship building. EK shared,

> For example, for one class, we have to create a portfolio. And, and like it's a little hard like to like to distribute the paper and the portfolio, and sometimes like I forget how to or the words I need to find to do the work to understand. The SI leader, she helped me, but my friends, they like help me with more and other things in my portfolio, and that is so helpful that I feel good about my work… I am able to feel good to turn it in.

Similar to EK, RQ stated,

> Yes, like the SI leader, she always asked me, where are you in this assignment, what do you need and, and then like step by step she helps me, so I feel more better about what I doing. But my friends in the group, they support me working, and I feel like I can accomplish anything, that I am going to be a good teacher.

The participants were forthcoming with the emotional conflicts they endured and openly shared and discussed their environmental stressors but did not immediately recognize these barriers as the impediments to their learning. Each participant needed prompting on how these life events connected to their academic skills, which occurred when questioned directly about how their struggles affected their academic journey. Nevertheless, they seemed conditioned to "have to overcome" their personal issues and did not acknowledge the need for help outside of their academics.

The connection that assistance in these areas would provide them with support and ultimately remove the barriers hindering their academic performance was nonexistent. The participants and the SI leaders offered comfort, encouragement, and identification but no real solution. There were no discussions on how to cope with the impediments that triggered the barriers to their academic success. Despite overlooking the emotional and environmental stressors as barriers, and their focus on language skills, both areas helped the students to form relationships. The data revealed the participants considered each other friends and felt cared for by each other and the SI leaders.

Promotes Friendship

Relationship Building

Throughout the interview process, the participants identified their relationships with their peers and the SI leader. The significant points that formulated the theme of friendship focused on building trust, mentoring, socializing with peers, creating a culture of acceptance, and connecting to similarities. The participant's interactions during the observations and reports from the interviews provided insight into how their relationships formed. Each participant discussed how they connected to their peers as friends.

FA stated, "My SI group, some of my best friends…no, they were not my friends before, but they are now because we all the same and we care about each other." They reported relying on each other and feeling cared for by the group. NN stated, "I believe my friends in the group [SI] care about me more than any other friends I have…I know this because they always there to help me, not only with schoolwork but anything I need." The word friendship was used 148 times among the 12 interview participants and was used in the context of relationships, connections, and encouragement.

Ten of the 12 interviewees reported their SI peers were the most caring and provided the most support. They reported creating "text" groups and meeting with each other outside SI sessions. They made statements such as, "Some of us meet for lunch in the park sometimes, just to get out of the house," and "Yes, we meet sometimes, even with our kids." Meeting outside the SI session was reported as typically not school-related. They reported socializing both in-person (when possible, due to COVID-19) and virtually. RQ stated, "Sometimes we stay on after the group to chat about things, you know, not schoolwork, just to hang out." Through the interview process, the students reported growing closer and accepting each other.

During the observations, I witnessed the students dealing with or sharing about many of the reported issues, which often revealed a level of intimacy, trust and relationship building. I discovered that the participants relied heavily on each other at times, often focusing on personal issues. The observations showed how the students responded to each other and demonstrated how they identified with their similarities. This seemed to help them to build connections and demonstrated how they depended on each other.

Connection

All 12 interviewees reported a connection to their peers. The participants discussed how being a part of the group helped them to feel better about themselves as students. They identified connections through formulating relationships with the group members and the SI leader. BC shared, "I am better student because of my friends in the group and because of the professor [SI leader]." Similarly, KL revealed connection with her statement, "We all friends now [end of the semester] and we, how you say…better

together." Connection was not just emotional or relational, and there was evidence of a connection to barriers and friendship; RP shared, "I could not do college without my friends in the group [SI sessions], we bond. We all have problems with our language, and we help each other, we help each other to understand." The participants displayed feeling connected as they identified with their similarities. For example, DC shared, "…knowing that my peers struggle with language helps me." FA stated, "SR has kids too, and we talk about how to cope with them and study too." Comparably, NN shared, "…sure we talk about the work, but when I feel bad, we talk about that too, like when we dealing with problems… like immigration, or our families."

Connections also arose as the participants explained how they showed concern for each other. When asked about who shows care and concern,

> MD stated, EK, she always help me feel better when I struggle, all my friend in the group do… I help them too, I share what bothers me too, I think that really helps."
>
> SR shared, There was a time when RP was really… how you say… frustrated. She really wanted to go home to her country because her grandmother was dying, but it so dangerous there, and she was so sad. I try comfort her… I told her about when my mother was sick and I so worried, and I couldn't go either… we talk about how that feel.

There were 370 interactions during the observations (see Table 2) that pointed to some level of connection the participants had to each other compared to the 125 interactions between the participants and the SI leader. I observed the participants as they helped each

other with the work; their interactions were very purposeful and linked encouragement to relationship connections creating a culture of care and demonstrating increased self-esteem.

Encouragement

Conversations were held between the participants about personal issues (e.g., children, families, work, loss, immigration). Again, while these conversations often veered them off track of the course work, the discussion always brought them back to feeling better and helped them move forward with their work. There were 101 interactions during my observations (see Table 2) of *students-encouraging-students*. During the interviews, all 12 participants discussed feeling encouraged by their peers and SI leader, and encouragement was identified in both academic and personal areas.

Additionally, 10 of the 12 interviewees reported the importance of being encouraging. As I analyzed how they defined encouragement, the following concepts such as empowerment, motivation, confidence, support, understanding, and comfort arose. During the observations, 72 of the 101 interactions (see Table 2) demonstrated how each of the students relied on each other's strengths. All of the participants appeared comfortable sharing personal information with each other, and they did so by offering support and showing kindness. The participants used language that was encouraging, such as – "You can do this" – "you know the material," – "Let me help you understand."

The outward display of non-verbal emotions was also a means of displaying connection. The participants often laughed with each other, but they also cried with each other. The crying always ended with the participants (and often the SI leader) offering

supporting sentiments to each other. The suggestions were typically wrapped in words of encouragement and identification. For example,

> BC stated, I so embarrassed [as she cries], I am sorry.
>
> SM spoke to BC, BC crying helps me too, you can cry here, do you want to talk about what makes you cry?
>
> BC responded, It just that my kids are fighting and my husband at work, and I ask mi mamma to watch the kids, and she just watching Telenovelas…when I ask her to watch mi boys, she just go like this [BC waves as if she were dismissing someone].
>
> SM chimed in, Ooohhh, that happens to me all the time. My husband wants me to go to school, but when I in class or here, he forgets about our kids. I sorry, its ok… let the kids fight, they work it out. We got things to do [both laugh, as does the entire group].

Throughout the interactions, the group demonstrated connecting with each other as they built a friendship through understanding and helping each other with their academic work but also through significant emotional support. The interactions created a culture of care.

Peer-to-Peer Interaction Creates a Culture of Care

While the SI leader and professors in the courses were viewed as a support, the level of support the participants gave each other seemed to contribute to their academic success. The following examples demonstrate how the participants reported feeling supported through the peer-to-peer interactions:

> DC shared,
>
> My professors are great, and my SI leader, she is now my friend.
>
> But, my friends that come to the sessions, they give me more help,

and I trust them. And they have my trust, I give to them my help too.

Similarly, KL shared,

It's my friends in the session, they give me the help the most. They know what I feel, especially with my English…it is so nice that they can speak to me in my language when I don't understand, they help me, and I help them, they my friends since the sessions now.

MD expressed comparable sentiments,

We check each other, you know, because we all each other has to do better… I mean the SI leader, she helpful, and she really nice, she my friend too, but the other students, they give me comfort, and we have the same problems, you know kids and papers [Immigration] and stuff.

Conducting the additional interviews led me to details that described the situations in which the participants engaged in conversations that identified friendship, emotional support, self-esteem, and a culture of care among the group members. I asked each interviewee to define friendship, KL defined friendship as a relationship between people who care about each other, GP's response was, "friendship? You know, people you like, who like you, who be your friends that care about you and support you." Care was always brought up when associated with friendship, RQ shared, "People you care about are your friends, and they care about you too. Friends are people [who] support you and make a difference." RQ referred to making a difference as people who motivate you and "help

you to be better." When asked to describe how supplemental instruction helped to develop friendships with group members, NN shared, "It is hard to explain, they just there to help and are so supportive. We make friends by working together, and sometimes because we have same problems." NN's response connected to RQ's response,

> Not sure SI is what helped us to be friends but being in SI together and working together and working with our leader, we just get along, and we get each other, and we help each other. I think we just realize that we are friends.

The peer-to-peer interactions promoted friendship and being together in the group facilitated their connections. The interactions demonstrated how they influence each other and how they care for each other. Additionally, these responses helped to illustrate the bonding and universality (Yalom, 2005) that occurred in the SI sessions. KL stated,

> SI a place to be together. I know it supposed to be where we study but it also a place where we be together as friends. It helped me know other people who have the same problems with classes, and life too sometimes.

The participants continuously discussed their relationships in both the initial and subsequent interviews. They identified each other as friends who helped each other through both academic and personal barriers. DC shared about her struggles during the pandemic and identified SI and her relationships in SI as a place where she has friends who help her to focus,

> Things are so hard sometimes, and especially now with the Corona, my kids are home, my husband is home, and going to

> group [supplemental instruction] is a place where my friends, the leader too – she my friend too, help me focus on things outside of what's happening in my house.

The relationships formed among the participants demonstrated connections that influenced their academic performance, and the peer-to-peer interaction in the group sessions helped the participants to share their experiences, creating an environment of trust, understanding, and friendship. Connections were made throughout the sessions that fostered relationships and helped the participants feel better about their work. BC shared,

> SI is the best place, I did not have friends at PCCC before I started in SI. I always felt so alone in school, and I never thought I would speak good English to make friends, but now my friends in SI help me with English and my homework too.

Emotionally, the group members identified feeling cared for, which allowed for a level of socialization not intended in SI. RQ shared,

> It is like having therapist [laughter] but not really, they are friends. I feel safe in the group even though it is Zoom, we bonding and we support each other. I don't really know how they help, they just do.

Similarly, KL identified the group as a place to feel cared for, she stated,

> The group help me so much. I feel like something always happening to me and I never have anyone to talk about it. One day in SI group, I just started to cry and everyone so nice to me and help me to feel better so I could do my work. It a special place.

There was evidence of academic persistence, but the participants attributed their success to the SI group interactions that did not necessarily align with the presented lesson. Their peer-to-peer interactions aligned with a culture of care, especially when discussing emotional issues. When asked about how the group responded during a time of emotional crisis, NN responded,

> There were times I did not feel well, not physically, but feeling sad or overwhelmed… when I share that I feel that way, the group is so caring and say such nice things to me that make me feel better to participate.

EK also shared about how the group provided her with emotional support, and discussed that the group was a place that aided in survival,

> When I started, I never thought about it [SI group] like a place for love and friendship, a place where I feel I can trust anything…being in the group is just like hanging out with my friends and people who care about you. Sometimes we forget that it is school because we get to talk about things. I know the group helps me, at first, I was shy but everyone so special and so nice and we all determined to just survive together.

Exploring these concepts connected how the group interactions developed universality among the participants (Yalom, 2005). The exchanges were often emotional and exposed the participant's emotional impediments, and the participants demonstrated tolerance for each other. Sharing their personal stories helped the participants connect to each other,

revealed intimacy among the group, and established an empathic connection fostering their relationship building.

Summary of Findings

This study explored how developmental education students make meaning of their experiences in supplemental instruction and demonstrated the effects of SI beyond its intended purpose. Through the data collection process, the participants both shared and exhibited their ideas, feelings, and thoughts about their experience in SI and revealed how they made meaning of their experiences in SI. The interview process offered a rich, thick data set (Charmaz, 2006; Ponterotto, 2006), which provided me with an in-depth examination of the role SI played in how developmental education students make meaning of their identity, competence, and relationship building.

Aligning the data with the concepts from my research questions – identity, competence, and relationship building – guided my data analysis and led to the emergence of six themes: exposes barriers, promotes friendship, problem-solving, encouragement, connection, and working as a team. Charting the phenomenon provided the relational connections among the participants, the SI leader, and the professor. The data provided an understanding of how students view themselves and offered insight into how students make meaning of their experiences, which led to the formation of *The Supplemental Instruction Culture of Care Model* (see Figure 5).

My findings suggest that students utilize academic interactions far beyond the intended purpose. The data reveals, and the Model demonstrates, that the relationships formed through peer-to-peer interaction provide students with the emotional support that allows them to attach to the academic work, identify competence, and expose how the

students seem themselves. While they did not always explicitly connect their personal and emotional interactions in SI to their academic success, it was clear that trustful relationships formed, and students relied on each other for emotional support. Reflecting on the participants' reports and interactions, the peer-to-peer group interaction created an interpersonal connection and helped the students to understand each other and themselves.

While SI is designed to address academic deficits, the social connection which occurred in the groups revealed the barriers students face that impede their self-esteem and perceived abilities to complete the academic work. The participants identified themselves as lacking language skills, but the connected identification helped the students align with a more positive identity. Their relationships influenced their behavior, and the connections formed were the apparent influences that motivated the participants to complete the work.

Chapter 5

Discussion and Implications

Chapter 4 outlines my data findings, which shaped the grounded theory and presented the connections to how developmental education students understand their identity, recognize their competence level, and build relationships. Guided by my interests in holistic supports for student success, drawing from my experience as a social worker and educator, and using the multifaceted approach suggested by Kuh et al. (2006, 2007, 2010) and Duckworth and Yeager (2015), I analyzed the data through a sociological, psychological, cultural, and organizational lens. Using a grounded theory approach (Charmaz, 2006) to examine the concept of Supplemental Instruction (SI) as holistic support for student success allowed me to ascertain how students make meaning of their experiences in SI. The analysis of the emergent themes led to the study's central findings and helped formulate *The Supplemental Instruction Culture of Care Model* (see Figure 5).

The following will connect the literature in Chapter 2, discuss how the findings in this study assist in closing the gap in the research, and how the theory emerged throughout the research process. This chapter will conclude with proposed suggestions for policy and practice and the need for further research, along with the limitations of this study.

Discussion of Emergent Theory in Relation to the Research Questions

The purpose of this constructivist grounded theory (Charmaz, 2006) study was to understand how developmental education students make meaning of their experiences in SI and the role it plays in students' identity, competence, and relationship building. The

reason for studying these areas was to develop a theory aimed at addressing students' emotional needs through academic support and offer an understanding of the need for holistic support. The theory is based on the relationships between the emergent concepts and the themes. This section connects the emergent grounded theory to the proposed research questions.

1. How do developmental education students make meaning of their experience in supplemental instruction?
    a. How do developmental education students experience identity, competence, and relationship building through supplemental instruction?
    b. What role does supplemental instruction play in how developmental education students' make meaning of their identity, competence, and relationship building?
2. What theory (theories) generates from exploring how supplemental instruction supports developmental education students' emotional needs?

The following illustrates how the emerging grounded theory served as a response to each research question.

Meaning Making Through Peer-to-Peer Interactions

Developmental education students make meaning of their experience in SI through peer-to-peer interactions. The results of the study suggest that through the peer interactions in SI, these students experience connections and build friendships through problem-solving and encouragement, all of which exposed their emotional and environmental barriers. As the barriers surfaced, the interactions between the students generated identification, which led to an atmosphere that the participants described as "a

place to feel cared for." This result is critical to understanding the barriers community college students face and how they make meaning of their academic experiences. These results resonate with the literature from Goldrick-Rab (2010) and Yue et al. (2018), that community colleges, especially those in urban settings, are often home to students who face issues of poverty, language barriers, lack of family support, academic unpreparedness, homelessness, food insecurity, and trauma. As the literature in Chapter 2 discusses, these areas often lead to deficits in identity development, competence building, and relationship connections (Chickering & Reisser, 1993; Erikson, 1980), all of which can hinder students' academic success. The participants in this study described issues that impede their learning process that related to family and cultural issues, trauma, (un)employment, and language barriers that were exposed during the SI sessions. As barriers surfaced during the SI sessions, the participants' interactions were rooted in emotional support. Their discourse emerged from their reported feelings of incompetence in their academic abilities but led to emotional support as they identified with each other. The academic ineptness, specifically their reported language barriers, led the participants to identify their emotional and environmental issues.

Their motivation for attending SI did align with the three-prong competence concept outlined by Chickering and Reisser (1993); intellectual, physical and manual, and interpersonal competence. The students craved knowledge and were focused on learning the course material. Their attendance and participation in SI were important to them and the group. The interactions in the SI group sessions revealed relationship building. They demonstrated teamwork, worked to solve problems, encouraged each other, established connections, and ultimately formed friendships. The connections

formed exceeded an academic relationship; their interactions were personal and centered on caring for each other. These participants made meaning of their experiences through their interactions; their connectedness came from their sharing of their personal stories and issues, which were received with care and support. The care and support became meaningful as they felt listened to and valued by each other. The emerging grounded theory indicates that developmental education students enrolled in college-level courses who participate in SI experience a culture of care.

Developmental Education Students' Experience of Identity, Competence, and Relationship Building through SI

The preceding section explains how the participants made meaning of their experience in SI; however, the answer to this second research question communicates how the participants experienced their identity, competence, and relationship building through SI. The data reveals that students connect their developmental education experiences to their identity. Furthermore, students dubbed English Language Learners connect their language barriers to their identity. However, it is important to note that the students entered college believing their language was a barrier and being placed in developmental education prompted identity formation. Identifying with their language barriers connected their perceived competence level. Additionally, the data exposes that environmental and emotional issues affect student well-being, which creates a negative academic identity. Entering college with an identity that suggests impairment, specifically with language, and reinforced through developmental placement, created an additional barrier for these students. The placement reinforced their belief that they were inept academically because of their language difficulties. Conversely, universality

(Yalom, 2005) occurred as the participants identified with each other's struggles, and as a result, relationships were formed.

While access is a signature feature of community colleges, so is a developmental level of academic placement—sixty percent of students are placed in developmental education nationally, making it a common practice at community colleges (Bailey & Cho, 2009; Snyder, de Brey, & Dillow, 2016). These students are informed of the necessity to complete the developmental sequences in order to earn their way to college-level and are identified as developmental education or ELL students. This categorization follows them until they reach college level. However, developmental courses do not always provide sufficient preparation for college-level coursework (Valentine, Konstantopoulos, & Goldrick-Rab, 2017), hindering competence building. According to Achieving the Dream (2018), and to reiterate Bailey, Jeong, and Cho (2010), more than 50% of students placed at a developmental level, have high attrition rates and low graduation rates.

The institution in this study places about 73% of its students in developmental education, with over 60% of students placing below English Language proficiency (PCCC IR Dept., 2019). This study included fifteen participants, and all were either placed in ELL or identified as ELL students. They accepted the classification of ELL and described themselves as such. Again, it is important to note that the students connected their identity to their language issues, identifying language as the most prominent barrier to learning regardless of their language ability. The students in this study reported facing four semesters of ELL courses prior to arriving at college-level if not permitted to participate in SI. This idea, coupled with statements from the students, suggests that

developmental education is a deterrent to engagement and completion, creating a negative identity and hindering competence building.

While the participants in this study did assume an ELL identity, they connected over the identity, which facilitated the relationship building. Students in the study did not explicitly identify developmental education as their learning barrier; however, they did share that they felt overwhelmed and unsure if they would be able to get to college-level when faced with the process. They described the developmental education process as arduous and overwhelming. While taking college-level courses while still at the developmental level, students reported this as "scary," on the other hand, they were also excited for the opportunity, and SI provided the participants with added comfort. The participants shared that their experience with college-level and SI together was far superior to "just taking" developmental courses.

Nevertheless, language was still a perceived impediment for these students. Upon admission to the college, they were identified as ELL students and owned their identity as ELL students. Throughout the data collection and analysis process, it became apparent that students were connected to their language barriers. They often shared in the SI group feeling incapable of completing the work, attributing their struggle directly to their language.

Considering the identified barriers and knowing that SI was designed as a typical academic support, I sought to learn how SI supported the participant's emotional needs. I acknowledge that the students attended SI for grade attainment; however, their fear of failure was more prevalent than their desire to increase their grades. While there was a myriad of issues the students reported struggling with, many of the participants attributed

their fear of academic success to their language barriers, citing the other issues as struggles they "just needed to deal with." They were conditioned to accept their environmental and emotional issues but associated their language with their identity.

Chapter 2 discusses Yalom's (2005) theory of group interaction and how groups designed to address a specific problem create social connections to combat the notion that Hutchinson et al. (2005) discuss as social exclusion. Students who are grouped in categories such as developmental education can experience a feeling of rejection or exclusion (Hutchinson, Abrams, & Christian, 2005). This study demonstrated both; students placed in developmental education feel excluded, but students invited to enroll in college-level courses with SI feel included. While the participants described that their feelings vacillated between fearful and excited, the SI group is where the inclusion occurred. In this study, the SI sessions were open to all students, but only developmental education students, specifically students who identify as ELL, took advantage of the sessions. These participants arrived to the SI group with an immediate feeling of identification; they all identified English as their second language.

Participating in the SI groups fostered relationships and created a sense of connection. Students identified with each other's struggles and offered comfort when the environmental and emotional barriers were exposed, establishing a caring environment. As Yalom (2005) discusses, groups allow for shared motives and goals, and the motive for these participants was college-level courses. They engaged in SI because they wanted to be able to feel as confident as they perceived their college-level counterparts did. Initially, the SI group provided the participants with hope that they would be able to complete their degree faster but did not combat their feelings of inadequacy, directed

explicitly at their language skills. The participants continuously discussed struggling with feeling competent. Yalom's (2005) notion of how group work instills hope resonates with the observed behavior among the participants. However, hope emerged through the caring nature of the group interactions and formed relationships. While language was at the forefront, during the SI groups, the students engaged in discourse that addressed all issues that impeded their abilities. They acknowledged areas such as their families, trauma, (un)employment, and culture when interacting. These areas provided identification as much as the language barriers, yet the participants were focused heavily on language as their most significant issue to success. Regardless of the issue, their demonstrated hope and their specific interactions demonstrated encouragement.

The *student-to-student* interactions that provided encouragement are where the students gained their hope to continue. Through the observations, I saw the relationship between the participants grow. The relationships revolved around the academic work collectively. However, their exchanges were rooted in the emotional and environmental issues that emerged as they engaged in the work. As the issues surfaced, they provided each other with identification, shared similar stories, and provided a forum to express feelings. It was not until the participants were able to acknowledge their feelings and issues that they were able to focus on course content. As the participants worked through their barriers, they acknowledged each other's success (Yalom, 2005), leading them to complete their academic work.

The dynamic in the group strengthened as the group continued to develop, which aligns with Tuckman (1965) and Yalom's (2005) theories that groups move through stages, building opportunities for identity development. I arrived at the group process

mid-semester, so I could not see how the relationships initially formed. I surmise that the initial bonding aligns with their original identification – language. Still, the evidence of the relationships was there, and I witnessed the connections strengthen through the exposure of emotional and environmental issues beyond language. As I interviewed the participants, they identified the other participants as friends and attributed SI to the developed friendships. They shared being friends because they understood each other and supported each other. There was a strong cooperation and collaboration between the participants (Tuckman, 1965; Yalom, 2005) that continued to thrive throughout the observations. The strength in the cooperation and collaborative process derived from their emotional and environmental shared experiences.

The peer-to-peer design of SI fosters personal relationship building despite the intended design. The development of the relationships among the study participants emerged through the peer-to-peer interaction. These interactions facilitated an environment that built connections and created universality among the participants (Yalom, 2005) beyond academic support. While the academic relationship grew and students understood the purpose of SI, the relationship development far exceeded academics. Through encouragement, the participants came to rely on each other. They worked together as a team to problem-solve, supporting each other emotionally through their individual struggles and barriers to learning, which provided a caring environment.

The Role SI Plays in Developmental Education Students' Identity, Competence, and Relationship Building

The previous questions address meaning-making, and how the participants experience identity, competence, and relationship building through SI, this research question addresses the role SI played in these areas. Supplemental Instruction is designed

to be an adjunctive approach to understanding course material (UMKC, 2020), offering students the tools to address learning strategies. An academic supportive service, like SI, aligns with the research that student success focuses on retention and persistence and does not address the emotional or environmental issues a community college student is facing. Understanding that academic preparedness is an important gauge of student success, I considered academics when designing the study. However, the goal was to look beyond academics, exploring what role SI played in students' emotional needs. The study viewed identity, competence, and relationship building through group interaction using concepts from Chickering and Reisser's (1993) identity development theory and Yalom's (2005) theory of group interaction. Additionally, when looking at the role SI played in identity, competence, and relationship building, the literature on well-being, identity development, and the ability to manage academic pressure (Duckworth & Yeager, 2015; Karp, 2016) aided in focusing on the exploration into holistic support.

The role of SI is typically voluntary for students, and those who attend are generally motivated by the potential for an increased grade. Academic supports, like SI, provide students with extrinsic motivation to engage in services that offer skill-building (Goomas, 2014). The notion of SI alone plays a role in motivation. As discussed in how students make meaning of their experiences, it is related to the desire for academic achievement connecting intellectual, physical and manual, and interpersonal competence (Chickering & Reisser, 1993; Goomas, 2014). The students in this study identified their initial motivation for attending SI was to "get a good grade" in the course and related the need for SI to their language barriers.

Participating in SI played an integral part in helping these students address their emotional barriers, which helped them to acknowledge their identity, become competent in their academic work, and foster relationships. I echo Karp (2016) on the importance of social relationships when discussing student success. The relationships formed in the SI sessions built a sense of comfort among the participants. They bonded over their struggles creating unity among the group and developing universality (Yalom, 2005). The social integration within the group helped them encourage each other, fostering the students' well-being. The participants' academic success became reliant on their connection with each other. They became concerned for each other's well-being, supporting Sigillo's (2018) notion that well-being is an essential indicator of academic success and student engagement. When engaged in the SI sessions, the participants could not focus on the course content without ensuring each other's well-being. Focusing on well-being and each other's emotional needs, the participants became more resilient and adaptable, which ultimately helped them feel competent and allowed them to engage in the academic activity designed for the session (ATD, 2018).

Ning and Downing (2010) discuss how the SI group process encapsulates an active learning process that assists students in discovering how they learn and their individual learning involvement. As I observed the interactions between the participants in the SI sessions, Ning and Downing's (2010) concept that students believe, listen, and often respond to each other in ways that foster truth became obvious. The role of peer-to-peer interaction in SI is crucial here. The students interacted far more with each other than with the SI leader, and their interactions were more meaningful and personal. While the SI leaders were also peers, the participants saw the leaders as authority figures. The

SI leaders' intent and focus of each session was to address the course lessons, yet each session included some form of emotional discussion facilitated by the participants. The discussions ranged from struggles with language to family and cultural issues to employment barriers. There was no planned integration for conversations that required emotional support. The students entered into these discussions organically. Because of the emotionally charged discourse that occurred, the participants shared that SI is a place for forming friendships and feeling cared for. They acknowledged that SI was intended for academic support and believed they were receiving help to understand the course material better; however, they attributed their interactions to friendship and care.

I saw the learning process develop; however, until the participants acknowledged each other's issues or problems, learning the course content could not begin. The connections formed forced the participants to focus on each other as individuals with care first and students second. However, they did relate their care to the need to help each other to complete the work. Here is where encouragement became evident. The participants used praising and reassuring language to help acknowledge environmental or emotional problems to move towards addressing the course content and engaging in the intended role of SI. Connecting the role SI played and the way the participants made meaning of their experiences in SI is centered on the caring relationships that occurred. The participants attributed the care as to what fostered their academic success and developed the friendships. They described the friendships made through participation in SI as the source of their confidence in their competence to complete the work.

The SI leaders in the study presented as a peer and offered encouragement to the participants but maintained the expected role. The participants acknowledged the SI

leader as a peer but typically recognized the leader with some level of power, creating a level of authority. Only two participants identified the leader as a friend, admitting their friendship was developed prior to enrolling in SI. The participants looked to please the SI leader in the same manner in which they looked to please the professor presenting with the notion posed by Plaskett et al. (2018) – that thinking of an educator as an authority figure makes it difficult for a student to share the truth about what is needed to foster success. However, even while maintaining an academic environment, the SI leaders helped empower the students to share their feelings with each other and build relationships among themselves. The empowerment came from allowing the participants to express their struggles and become vulnerable to each other while sitting back and allowing the conversations to unfold.

The SI leaders in the sessions participated in creating the culture of care but only offered academic suggestions. The participants relied much more on each other for emotional support and typically relied on the SI leader for academic encouragement. With the intended role of SI to be academic support reiterating the course content, allowing for emotional support provided a space for the participants to share their struggles with their identity and competence. This permitted the participants to expose their identity, focusing heavily on their language barriers and connecting with each other over this outward barrier. The identification of the language barriers was often the catalyst to further connections. As the participants felt comfortable with each other because of language and offered caring support to each other, additional barriers were exposed. There were multiple interactions where students used phrases such as “me too” or “I understand” or “I experience that too,” demonstrating that universality (Yalom,

2005) was beyond the language barrier connection. Again, without intention, the SI leaders allowed the participants the time and space to discuss personal issues; their silence fostered the permission to engage in the personal relationship building.

The culture of care that evolved supports the notion that learners who are involved in shaping the learning environment (Ning & Downing, 2010) are more apt to solve problems. The learner who influences the environment creates a space for collective learning (Ning & Downing, 2010). I saw this happen in each observation. Working together as a team to problem solve arose regularly. However, the interactions were not limited to course content. In fact, the problem-solving that aligned with the course content often did not happen until emotional issues or personal problems were addressed. Neither the students nor the SI leaders solved each other's personal problems, but what did occur among the peer-to-peer interaction was support and care.

Each session consisted of multiple conversations that included emotional or social barriers, and nearly all the conversations circled back to language issues identified by the participants. The conversations sparked universality (Yalom, 2005), and by identifying what each participant was struggling with and by acknowledging each other's issues, connections were formed, and friendships were developed. By allowing the students in the session to communicate with each other and offer support, the SI leader created an inclusive environment and minimized the pressure associated with the learning (Zaritsky & Toce, 2006; Skoglund, Wall, & Kiene, 2018), establishing a new role for SI.

The Emerging Theory: The Supplemental Instruction Culture of Care Model

The core concept in this grounded theory is the emergence of a culture of care. From their inception, community colleges have established academic access to students.

However, the education provided does not typically support the student from a holistic perspective. The following provides the implications to the theory development and offers a discussion on how SI creates a culture of care among its participants. As a reminder, the intended purpose for my data collection analysis processes was to understand how the participants made meaning of their experience in SI, connecting identity, competence, and relationship-building to the role SI plays. The results of the emerging grounded theory (Charmaz, 2006) revealed that students who engage in SI experience a culture of care. This culture of care emerges as the participants make connections and develop friendships. These relationships are built upon the exposure of the barriers the students face and their perceived impediments. For the participants in this study, language was the most significant identified barrier. However, environmental and emotional barriers were exposed as they participated in the SI group sessions. This exposure surfaced as the relationships formed and the students connected with each other.

Using SI as a vehicle to understand how students make meaning of academic support services provided me with insight into how students see themselves in academic support settings. The *Supplemental Instruction Culture of Care Model* (see Figure 5) demonstrates the process as to how students engaged in peer-to-peer support, when permitted, establish a caring environment that addresses needs beyond academic support.

SI promotes peer-to-peer interactions in an academic setting. Although designed as an adjunctive approach to offer students the tools to learn strategies for academic material (UMKS, 2020), the initial interactions naturally facilitate the exposure of the students' impediments. The exposure allows for vulnerability and fosters caring reactions and responses, creating a culture of care. The continuous support generates the natural

formation of universality through peer-to-peer exchanges. Through the universality, the students identify with each other and realize they share the same barriers to learning and similar environmental and emotional issues. They form connections and provide encouragement through working as a team and problem-solving. Their teamwork and problem solving expand beyond academic work, facilitating emotional support for their language barriers, family and cultural issues, (un)employment, and trauma. As these barriers are exposed through their relationship building, friendships are developed. The emotional support facilitated by the continued peer-to-peer interactions is fluid, demonstrating how the students influence each other, reinforcing a culture of care.

Relationship of Grounded Theory to Existing Literature

In addition to explaining how the findings answered this study's research questions, it is equally valuable to understand how *The Supplemental Instruction Culture of Care Model* (see Figures 1 and 8) extends the existing literature. Despite the findings in this study, questions remain concerning how to purposefully integrate holistic support into academic services to create a culture of care. However, connecting the research regarding developmental education students at community colleges with the student success literature and integrating the data from this study, I assert that there is a need to purposefully incorporate the culture of care model into academic support services.

With the research on SI rooted heavily in grade attainment, persistence, and retention, discovering how a culture of care was formed through SI sessions necessitates converting academic services to integrate holistic support. The universality developed and the intimacy within the relationships among the participants allowed them to strengthen their emotional needs and continue with the intended purpose of SI. Derived

from the culture of care theory initially developed by Leininger, who emphasized the need for integrating cognitive, supportive, and facilitative care into nursing practice (McFarland & Wehbe-Alamah, 2019), a culture of care has been introduced into education over the past two decades. There is literature that supports building a culture of care, and more recent literature has surfaced due to the added emotional struggles of COVID-19. Still, the literature does not explicitly address integrating holistic support into currently developed academic support services, such as SI, in order to facilitate a culture of a care.

Much of the literature addresses specific areas that create emotional strife and how to address those areas, such as Goldrick-Rab, Broton, and Hernández's (2014) research that discussed the need to address food insecurity and housing among community college students. Additionally, Long (2019) discusses the importance of creating a caring culture using trust-building methods across faculty, administration, and support staff; that building a caring culture among the staff will create conditions that filter the caring culture to the students. The JED Foundation, a non-profit organization that seeks to protect emotional health and prevent suicide for teens and young adults, also offers suggestions for policy and practice that addresses building a caring environment on a college campus. The Association of College and University Educators (ACUE) (2020) offers practical approaches for faculty to integrate into the classroom designed to support student well-being and mental health. While along the lines of the findings of this study, in support of faculty being instrumental in contributing to the creation of "caring campus communities," the recommendations from ACUE (2020) deliberately focus on suggested pedagogical practices in the classroom. This discussed literature offers suggestions for

creating a culture of care on campus, but and do not discuss integrating purposeful training for building a culture of care into academic support services.

Addressing Karp and Bork's (2014) assertion that academic skill level cannot be the only measure for student success coupled with the data from this study supports creating an environment that aids students' emotional needs in academic support services. However, there remains a gap in how we train student leaders, faculty, and staff to integrate strategies that facilitate a culture of care into academic support services, such as SI, with the intent of developing a holistic model for education. In this study, a culture of care was formed through participation in SI group sessions, and happened organically, but that may not always be the case. If building a culture of care is not intentional, then there is a continuation of siloing academic and emotional support. Therefore, using the findings in this study emphasizes the need for providing academic space that allows students to discuss their emotional and environmental issues and the necessity for training student leaders, faculty, and staff who deliver academic support services.

Chapter 2 discusses Yalom's Theory of Group Interaction and introduces twelve factors that contribute to the success of group interaction. The facilitation of the SI groups naturally followed the stages that Yalom (2005) discusses and demonstrated how the participants experienced hope from the universality that developed. The participants reacted to each other's issues and barriers as they shared experiencing similar issues. The interactions came about through the group process as the participants recognized they not only had things in common but had what to share and offer each other. This is where friendship became obvious. Expressions of their own feelings led to how they made meaning of their experiences in and out of SI, connecting their life experiences to the

academic work. Cohesion was established and connections were formed. As the participants shared their experiences and the SI leaders allowed the group to take its own shape, how they expressed their feelings became aligned with the goal of feeling academically competent (Yalom, 2005)

As discussed in the answers to the previous research questions, developmental education students, and more specifically English Language Learners, form an identity to their language barriers and bond over academic struggles. Landing on how the participants formed a culture of care during their participation in SI, reiterates Duckworth and Yeager (2015) and Karp's (2016) notion that creating a multidimensional holistic view of student success that address students' well-being, identity development, and the ability to manage academic pressure is essential. I also acknowledge and argue that the data in this study echo Karp (2016) and Bailey, Jaggers, and Jenkins' (2015) contention that student success requires "intensive, intrusive, and holistic supports." Using SI as the foundation to argue this need, the data revealed how the students addressed their emotional and environmental needs by encouraging each other and working together as a team. More importantly, they developed connections through their identified issues building friendship, which demonstrates the need for facilitation of emotional support in guided academic groups.

Chapter 2 discusses the importance of purposeful engagement. Goldrick-Rab (2010) argues the need to address structural and institutional constraints to student success. Entering the SI sessions, I understood the intentional practice of SI and expected to see a student leader guiding the participants through the academic course work. However, seeing the emotionally charged conversations occur and watching the students

work together in support of each other's issues and barriers confirmed the importance of dismantling the current institutional constraints.

Selingo (2021) argues the need to prioritize a sense of belonging, especially as we approach a post-pandemic era. Institutions need to adopt a greater role in assisting community college students with services that offer comfort in and out of the classroom. However, Selingo (2021) discusses comfort related to learning strategies, not specifically to integrating a holistic approach to academic support services. Another area that Selingo (2021) touches on that relates to the importance of building a culture of care in academic supports is thinking about the future of community college students' long term. Again, while not explicitly addressing building support services that intentionally provide a culture of care, he does address the need to view services through the lens of the students' needs moving beyond what is good for the institution. Selingo's (2021) argument supports Goldrick-Rab's (2010) argument pre-pandemic that institutions need to engage in a culture shift that is student-centered.

With the intent of SI being a supportive service to address persistence and retention, I support Plater's (2021) sentiment that we have "not necessarily responded to what our students are asking of us and expecting of us, and we are losing students because of that" (p. 7). The COVID-19 pandemic has placed community college leaders in a unique position to address areas that many have not thought necessary or as the responsibility of the institution. While Plater (2021) does not address the idea of integrating a caring culture specifically into academic support services like SI, there is a strong indication that community colleges need to respond to the emotional health of the entire college community. One of the major areas Plater (2020) discusses is the barriers

to college. He specifically discusses technology, transportation, and methods to support students once they enroll (e.g., success coaches, chatbots). All of these areas support moving the institution towards a holistic approach but still do not address purposeful training to integrate a culture of care in academic support services.

The peer-to-peer interaction in this study is the crux of what facilitated the exposure of the participants' impediments, which reinforces the research of Plasket et al. (2018) on peer mentoring. In Chapter 2, I refer to the work by Plasket et al. (2018) using social learning theory to create a role model approach in peer mentoring. The research suggests that pairing mentors with students who are relatable and draw from similar experiences create a sense of self-efficacy through relationship building (Plasket et al., 2018). Additionally, the research by Cerna, Platania, and Fong (2012) discussed in Chapter 2 identifies the importance of peer-to-peer support, specifically with SI. While their research supports the academic success using the peer model, it does not address building a culture of care. However, taking from the peer-to-peer mentoring approach, using a model such as social learning theory can be the foreground for developing training that integrates a caring approach to academic support services. The *Supplemental Instruction Culture of Care Model* demonstrates this idea as the participants in this study presented with similar issues. Through the identification, I watched as the participants provided each other with encouragement, which created the connections that allowed them to work as a team and problem-solve. These behaviors facilitated the emotional support that enabled them to share their emotional and environmental barriers to learning. Through these interactions, friendships developed, creating a culture of care.

Implications for Policy, Practice, and Research

The following will seek to offer insight to community colleges that face students with multiple layers of developmental instruction and silo supportive services to assess how students make meaning of their experiences. The cornerstone of this grounded theory study lies in how the participants made meaning of their experiences in supplemental instruction and what role SI played in identity development, competence, and relationship building. The literature in Chapter 2 highlights SI and discusses its intended use as an academic support service to advance retention and persistence pass rates (Arendale, 1994; Blanc et al., 1983; Goomas, 2014; McCarthy, Smits, Cosser, 1997; Martin & Arendale, 1990; Maxwell, 1998; Bowles et al., 2008; Ning & Downing, 2010; Skoglund, Wall & Kiene, 2018), however, does not focus on the holistic aspect of addressing participants' emotional needs. The literature also emphasizes the need for community colleges to integrate holistic support into academic services.

The developed theory identifies that relationships built during academic support foster a culture of care, establishing the idea for holistic support integration into academic support services. The following outlines implications for how community college faculty and administration can begin to implement holistic support into academic support services. This study has used SI as the basis for identifying how students make meaning of their experiences, but the discoveries can lend to other academic support services. To comment on potential policy and practice, I draw from the data collected from the participants, ensuring that the recommendations come from their thoughts, feelings, and beliefs. From what I observed, the following are recommendations for faculty and administration to consider how care is infused into teaching and administrative practices.

Historically, community colleges have focused on the singular approach to student success completion rates. However, now, more than ever, it is imperative for institutions to take a student-centered approach and look to directly address student needs from a holistic perspective, focusing on emotional needs. New literature published during the COVID-19 pandemic (Plater, 2021; Selingo, 2021) highlights the importance of meeting students where they are; providing wrap-around services creates an environment that demonstrates care (Plater, 2021). Selingo (2021) brings awareness to how the pandemic leads students to seek out institutions that provide services for emotional health. The assertion is that students are specifically looking for a welcoming and safe environment. Institutions can only support this need if there is a culture shift, leading organizations away from relying on retention and completion rates as indicators of success and moving towards viewing the students' needs psychologically, socially, culturally (Kuh et al., 2006, 2007, 2010; Duckworth & Yeager, 2015).

The findings in this study correlate to the research conducted by Plater (2021) and Selingo (2021), supporting the importance of developing a culture of care. Supplemental instruction provided a platform for the participants to connect to each other. However, as we see in Chapter 4, the connection did not solely emerge through academics; personal connections were the basis of the relationships. While coming together for academic gain, it was the exposure of their barriers to learning and personal issues that helped the participants to connect and identify with each other, strengthening the bonds and creating supportive relationships. Community college students arrive at the institution with a plethora of struggles creating a defeatist attitude to academic success. Many institutions contribute to the defeated identity by designing multiple semesters of developmental

education with little to no support that offers hope for completion (Bailey, Jaggers, & Jenkins, 2015; Duckworth & Yeager, 2015; Karp, 2016; Goldrick-Rab, 2010).

To address student success holistically, administration and faculty need to prioritize belonging and purpose. Selingo (2021) reports that relationships are central to the student experience, and to build relationships, we must make a concerted effort to address emotional needs in and out of the classroom. This idea supports the data in this study that building a culture of care promotes student learning and helps students to connect to the learning process. Devoting more class time for students to connect with each other through project-based and service-learning opportunities can help to facilitate relationship building. As we saw through the data, group interactions create universality (Yalom, 2005) and help students to connect to each other, building competence in learning. Additionally, concentrating on integrating support services that address the emotional well-being of students and paying close attention to how students make meaning of their experiences is essential. This study discusses training leaders in peer services but ensuring training for faculty and administration urges everyone to provide support to students.

Plater (2021) highlights the adage of "it takes a village" when discussing the need to shift the culture at community colleges. Using the data in this study and the research from Plater (2021) and Selingo (2021) suggests that the culture shift should move towards providing support that integrates care. I will reiterate the research of Goldrick-Rab (2010) and Yue et al. (2018), that a significant number of community college students who attend urban community colleges are persons of color, first-generation, and academically challenged, and that these students often face issues of poverty, language

barriers, lack of family support, academic unpreparedness, homelessness, food insecurity, and trauma. The data in this study support that all of these are present in the participants and are factors that create emotional distress hindering academic success. The observations and interviews in this study demonstrated how these emotional impediments lead to identity development that impedes student learning. However, allowing the students to address their issues in SI exposed the barriers, helped them form connections, foster relationships, and cultivate the competence needed to achieve success.

From a holistic perspective, integrating training into academic supports that encourages emotional and social relationship building can foster identity development, leading to a more interconnected learning environment. Therefore, creating sustainable interventions that require strategic support and purposefully connecting students with what they need and when they need it provides multidimensional support to assist with developing students' identity (Karp, 2016). This thinking moves institutions away from the siloed services that focus only on measuring student success by retention and completion rates and drives the institutional thinking towards creating holistic supports for student success.

The data in this study support the theory that allowing students to engage in discourse that addresses emotional well-being creates a culture of care. This culture of care perpetrates student learning. Through the observation protocol, I witnessed students in SI groups connecting over their barriers and emotional impediments. The connections and the relationships built became the impetus for students to move forward with their academic work. The participants needed to move the emotional and environmental barriers out of the way in order to engage in the course content. SI leaders remained

separated from the discourse related to emotional and environmental issues. However, they naturally allowed the participants to engage in emotionally charged discussions.

I am not suggesting that training for SI leaders focus on making them experts in solving emotional issues. There is no training to help SI leaders as peers to provide mentoring or support for emotional issues. So much of the SI training focuses on the SI leader and ensuring that the SI leader understands they are not a tutor. However, suppose SI leaders were engaged in training that helped to facilitate discussions to alleviate the kinds of stressors seen in the data from this study to cultivate the caring environment. In that case, academic support becomes multidimensional and geared toward holistic support. For example, as we saw with the participants in this study, many students will share their struggles if provided a forum. Training SI leaders to show compassion using active listening skills and appropriate responses (ACUE, 2020) helps the SI leader to engage in building the connections rather than being silent and allowing the students to foster relationships. Additionally, providing training for faculty, administrators, and staff that encourages a culture of validation for experience and integration of supportive services (ACUE, 2020), promotes the culture of care and creates a welcoming and inviting environment.

Providing training to SI leaders that moves beyond the sole academic focus but facilitates group interaction and relationship building can assist with building confidence in developmental education students. Training SI leaders to identify participants' emotional needs will ensure that SI leaders provide the space for discourse that helps students encourage each other and address emotional and environmental issues not related to the course content. SI leaders do not need to be trained on how to solve

emotional problems but how to identify when there is a need to set the academic work aside and allow the students to address their issues or barriers.

It is important to note that if training is being implemented, funding needs to be addressed. In the case of this study, funding for SI came from a Title V Teachers Excellence Grant. This study will provide the data necessary to demonstrate the need for the institutionalization of supplemental instruction beyond grand funding. Discussions on institutional funding for SI, should include expanded training for SI leaders, faculty, and staff that incorporates the SI model with a holistic approach to academic support.

As I observed in this study, once the participants were able to address their emotional issues, their academic work became possible. Coincidentally, in this study, the SI leaders were also former ELL students, and all, but one, had previously participated in SI. Considering the natural identification may have been the reason why the SI leaders sat back and allowed the emotionally charged discussions. They maintained their role as trained but did not attempt to stop the discussions and move the group onto the academic work until they were emotionally ready. If an SI leader cannot identify with the group's issues or does not naturally see the need to allow the emotionally charged discourse, the interactions may not be permitted. Therefore, providing training that helps SI leaders understand and identify the importance of peer-to-peer support infuses the holistic approach. Providing SI leaders resources to make referrals and recommendations for additional support that aligns with any exposed environmental or emotional barriers can also facilitate a stronger connection between the SI leaders and the students. Finally, training that supports the SI leader as the peer and allows them to identify with the participants can foster a more robust culture of care. This will help the SI leaders engage

in the emotionally charged discussions that may surface, helping to address student well-being.

The research on SI discusses the relationship that is often fostered between the SI leaders and the faculty member teaching the course. SI leaders work closely with the faculty member and receive regular mentoring. The literature used in this study highlights information that the mentoring SI leaders receive fosters role-model behavior for the SI participants. Research supports that the mentoring interactions between faculty and SI leaders often lead to improved academic performance, enhanced communication, relationship-building skills, and increased self-confidence and self-esteem as peer-to-peer leaders (Stout & McDaniel, 2006). It is believed that this developed sense of confidence as a peer leader in the content area can help to motivate the participants. However, the participants in this study viewed the SI leader as an authority figure. This belief arose as the SI leaders remained distant from interactions and conversations associated with the emotional or environmental stressors. Further research conducted should study how training to address the connection between emotional well-being and the learning experience can be integrated into SI leader training.

To further develop *The Supplemental Instruction Culture of Care Model* (see Figure 5), studying how integrating this type of training can support the idea of addressing student success holistically. From a holistic perspective, integrating training that encourages emotional and social relationship building can foster identity development—consequently leading to a more interconnected learning environment. Goldrick-Rab (2010) proposes that to connect institutional purpose to holistic support, there is a need to look at how institutions create structural and institutional constraints on

student success. Institutions that silo support and intentionally separate academic support from emotional support perpetuate the idea that students should dismiss their emotional and environmental issues and focus on learning. As the data showed, students placed at the developmental level are facing more than just academic issues. Each student in the study faced some type of emotional impediment that hindered their academic success. Providing holistic support that allows for the identification of the emotional and environmental issues these students struggle with, removes the siloing of services. This can promote more effective ways to reduce the amount of time developmental education students face in the remediation, which can not only increase student retention but help students to address their well-being. By doing so, we help students to build confidence and recreate their identity. This can only happen if institutions set aside the idea that academic and emotional support should be separate.

We have become accustomed to measuring student engagement by the time and energy students dedicate to their academic experience, explicitly looking at retention and completion rates (Kuh et al., 2006, 2007; Kuh et al., 2010; Wolf-Wendel, Ward, & Kinzie, 2009;). There is a plethora of research that discusses students who intentionally get involved have a better chance of succeeding (Astin, 1999; Hart, 2007; Ethington & Horn, 2007), and students who actively participate in the college experience become invested in the institution, which often leads to more meaningful experiences (Ashwin, 2003; Roberts & McNeese, 2010). Analyzing the data in this study supports these ideas but adds that emotional issues arise during academic support. Providing services that nurture this behavior will foster stronger identity development, helping students gain a sense of self and promote competence. Leadership at community colleges needs to

acknowledge the importance of creating a culture of care to ensure students' well-being is a shared value for the college community (JED, 2018). This type of acknowledgment begins to create an institutional culture change and helps to ensure students will have increased engagement and feel supported by the institution.

It is well documented that community colleges are focused on retention and completion. Creating an environment that allows for holistic support helps to develop the purpose students need to feel connected to their learning. The research in this study supports the ideas of Chickering and Reisser (1993) that connection helps to create more meaningful engagement. The meaningful interactions between the participants demonstrate the ancillary effects of emotional well-being for SI participants at community college. With the focus on increasing academic performance, SI leaders are not trained to address social or emotional issues. Additionally, there is no training for SI leaders to connect social or emotional deficits that may impede the participants learning experiences. Likewise, faculty and administrators are not typically provided with professional development in areas that help to support students holistically.

This study revealed that students who were placed in a developmental education sequence, especially English Language Learning, form an academic identity associated with their deficits. By being forced to enroll in developmental education in order to gain access to college-level courses, the participants identified themselves as "not good enough." When asked how they felt about enrolling in college-level courses simultaneously, they reported vacillating between excitement and insecurity. Seventy-five percent of the interviewees reported not feeling capable of completing the college-level course work at first but reported that attending the SI group sessions was the

impetus for their success. They later acknowledged that the support and care developed amongst the participants as their struggles surfaced is what actually helped with their success. Creating a sense of belonging and connectedness came from the participants sharing their issues and barriers, which was never an intended format for SI.

Additionally, I resonate with Baxter Magolda's (2009) argument that holistic support occurs when institutions focus on how the intersection between behavior and cognition revises how we support student learning. This type of shift moves the institution away from silo supports and creates a more interconnected learning process. Thus, encouraging "help-seeking" behavior lessens embarrassment, secrecy, and shame around emotional and environmental issues (JED, 2018). Again, this suggests the need for a culture shift addressing the importance of delivering holistic support services, endorsing the culture of care model. By addressing student learning through the multifaceted approach suggested by Kuh et al. (2006, 2007, 2010) and Duckworth and Yeager (2015), viewing student learning through a sociological, psychological, cultural, and organizational lens, we begin to integrate a holistic approach. This approach addresses students' physical, intellectual, cognitive, and emotional skills, promotes social skills, and addresses identity-building areas that promote competence and relationship building (Achieving the Dream, 2018; Chickering & Reisser, 1993).

Limitations of the Study

The following describe the limitations of this study and elaborate on the limitations discussed in Chapter 3. This study was intended to address students who were placed at the developmental level taking college-level courses with SI support. This study only included developmental education students and, more specifically, English

Language Learners. While the intent was not to only study ELL students, the program used in the study had a high population of ELL students. The study's sample included fifteen participants who all identified as ELL students. Eleven of the students were placed at the ELL level, and four were placed at the developmental level in English. However, all fifteen participants identified English as their second language and identified language as a significant barrier to their academic success. Because of the limited population, specific to English Language Learners, language became a significant issue discussed. The results of this study are limited by the sample evolving around only students who identified as ELL students. Nevertheless, while this study was not designed to address language or language studies, limited to working with English Language Learners demonstrated an unexpected but significant area where wrap-around, holistic support is needed for ELL students.

Data in this study were collected from March to July 2021. Observations began in late March around mid-term. Limitations in this study arose as I was not able to see how the relationships initially formed, but the evidence of the relationships was there when I arrived. Participants were able to describe their relationships, but there was no focus on how long the relationship-building process took. Further research could provide insight into how the relationship initially formed.

This study sought to explore how developmental education students make meaning of their experiences in supplemental instruction and what role SI plays in addressing their emotional needs. Emotional needs were defined as identity, competence, and relationship building. Limitations arose around the role SI leaders played in the process. SI leaders were not interviewed and were only observed. Though, while setting

up times for the observations, organic conversations occurred with the SI leaders. They shared anecdotal experiences becoming an SI leader; that participating in SI the previous year promoted their role as SI leaders, yet this information was not addressed nor was it intended to be addressed. However, because this research did not collect any data as to the SI leader experiences, there is room for further research to include the experiences of the SI leader who had participated in SI prior.

In Chapter I, I discussed a limitation associated with race and culture. The nature of the population makes race and culture inherently present; however, I did not study their specific effect or role. My study was conducted at an urban community college where 70% of the population identify as students of color, and more than 50% identify as first-generation students from immigrant families. The focus of this study was on the academic placement of the student and did not account for culture or race. Because the majority of the sample was host to students who identified as ELL students and reported cultural and family emotional stressors, expanding the research to include culture and race may help further the theory.

This study only included developmental education students; however, they only make up a portion of the population enrolled in an urban community college who face emotional impediments. Further research should be conducted with student groups other than developmental education students. Additionally, conducting further research with college-level students can help to enhance the theory and drive the idea of initiating holistic support into academic support services, like SI.

Conclusion

The intent of this study was to convey how the emerging theory answered the research questions posed. The dissertation was also designed to discuss how the findings of the study extend the current literature on SI, student success, and holistic support. Furthermore, this study offered noteworthy suggestions for faculty and administration on the importance of integrating training that fosters a culture of care into academic support services. Finally, the study offered limitations that occurred in the research and provided suggestions for further research to develop the theory.

However, the value of this study rests on its significant contribution to the existing literature bringing attention to *The Supplemental Instruction Culture of Care Model*. The theory-building process served as a foundation for innovative future interventions, suggesting that the connections fostered between students support the notion that student success does not solely occur through academic ability or intellect. The Model provides insight for community colleges to realize that there is a need to include emotional well-being, identity development, and how to cope with emotional and environmental stressors to ensure we create a culture of care.

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Appendix A

Interview Protocol

Research Questions

1. How do developmental education students make meaning of their experience in supplemental instruction?
    a. How do developmental education students experience identity, competence, and relationship building through supplemental instruction?
    b. What role does supplemental instruction play in how developmental education students' make meaning of their identity, competence, and relationship building?
2. What theory (theories) generates from exploring how supplemental instruction supports developmental education students' emotional needs?

Introductions

- ✓ [Student name] thank you for taking the time to meet with me today. Your input is appreciated.
- ✓ You have been selected for this interview because of your participation in Supplemental Instruction, specifically to discuss your experience.
- ✓ Participating in this interview is voluntary, and your identity will be kept confidential. The information collected will be used in the research process, but your name will not be associated with your answers. Additionally, while I am using the information provided for research, your name or any identifying information will not be shared or identified in any documents, reports, or publications. Are you still willing to participate?
- ✓ The interview is designed to take about 1 hour; however, depending on your answers, we may go over. Are you still willing to participate?
- ✓ If you change your mind at any time, we can stop the interview, and your information will not be used. Are you still willing to participate?
- ✓ To ensure the accuracy of your answers, I would like to record the interview. Will you consent to be recorded?
- ✓ At this time, I would like to ask for your verbal consent to this interview. By verbally consenting, you agree to participate in the interview and to be recorded. Again, let me assure you that your answers will not be associated with your name.
- ✓ Before we begin, do you have any questions?
    - Thank you. I am going to begin recording.

Interview

Again, thank you for your participation. I am going to ask you a series of questions about your experience in Supplemental Instruction. There are no right or wrong answers, only your answers. Your honesty will be beneficial to my research, and in no way will it reflect on your participation in class or as a student.

I would like to start with some basic informational questions:

1. How long have you been enrolled at the institution?

2. Is this your first experience with SI?

Thank you. Next, I want to begin discussing your experience in SI.

1. What is supplemental instruction (SI)?

2. How would you describe SI to a friend?

3. Think about your SI experience throughout the semester, and please describe your experience to me.

4. Tell me about your struggles as a student.

    a. What in your life has shaped those struggles?

5. Think back to the moment when you learned you could take college-level courses while engaging in SI and describe that moment to me.

6. How did you feel during your SI experience?

    a. How did that change over the semester?

7. Describe your interactions with your peers? SI leader?

8. Who has been the most helpful to you during your time in SI?

    a. How has this person/these people been helpful to you?

9. How did your peers show they were concerned with your experience? How did your SI Leader show he/she was concerned with your experience?

10. Think about how the group interacted with each other and the SI leader and describe some interactions that stood out to you.

11. What kept you going to SI?

12. What tools or strategies did you learn through SI that helped you to be more successful?

13. What, if any, were the most valuable skills you gained from attending SI?

14. In what ways do you interact with any of your SI peers outside of SI? *Prompts: study, social*

Thank you. Now, to wrap-up our interview, I have just a few more questions.

15. After having this SI experience, what advice would you give to other students who engage in SI? Faculty? SI leaders?

16. Is there anything else you think I should know to understand your experience in SI?

Thank you again for your participation. One last thing, if I need more information from you or have any other questions, can I contact you? What is your preferred method of contact?

Appendix B

Interview Protocol Matrix

Research Question	Theory	Data Source Detailed	Analysis Technique
1. How do developmental education students make meaning of their experience in supplemental instruction?		**1.** What is supplemental instruction (SI)? **3.** Think about your SI experience throughout the semester, and please describe your experience to me. **15.** After having this SI experience, what advice would you give to other students who engage in SI? Faculty? SI leaders? **16.** Is there anything else you think I should know to understand your experience in SI? *Researcher Memos*	Process coding In vivo coding Axial coding
1a. How do developmental education students experience identity, competence, and relationship building through supplemental instruction?	*Identity* *Competence*	**4.** Tell me about your struggles as a student. **4a.** What in your life has shaped those struggles? **5.** Think back to the moment when you learned you could take college-level courses while engaging in SI and describe that moment to me. **6.** How did you feel during your SI experience? **6a**. How did that change over the semester? **12.** What tools or strategies did you learn through SI that helped you to be more successful?	Process coding In vivo coding Axial coding

	Relationship building	**8.** Who has been the most helpful to you during your time in SI?
		
		8a. How has this person/these people been helpful to you?
		
		7. Describe your interactions with your peers? SI leader?
		
		9. How did your peers show they were concerned with your experience? How did your SI Leader show he/she was concerned with your experience?
		
		14. In what ways do you interact with any of your SI peers outside of SI? *Prompts: study, social*
		
		Observations:
		
		• *How many times do the students interact:*
		  ○ *Each other?*
		  ○ *With the SI leader?*
		• *How many times do the students encourage each other?*
		• *How many times does each student ask questions?*
		Types of Interactions
		• *Do the students seem to rely on each other? SI leader?*
		• *Do the students seem to motivate each other?*
		• *Do the students seem to encourage each other?*
		• *Do the students seem to feel comfortable with each other? With the SI leader?*
		• *Is there any evidence of relationships?*
		Researcher Memos
			Process coding
			
			In vivo coding
			
			Axial coding

Research Question	**Theory**	**Data Source Detailed**	**Analysis Technique**
1b. What role does supplemental instruction play in how developmental education students make meaning of their identity, competence, and relationship building?	*Identity* *Competence* *Relationship building*	**11.** What kept you going to the SI sessions? **2.** How would you describe SI to a friend? **13.** What, if any, were the most valuable skills you gained from attending SI? **10.** Think about how the group interacted with each other and the SI leaders and describe some interactions that stood out to you. *Observations:* • *Is there any evidence of universality among the participants?* • *Are there any conversations or interactions not related to the course work?* *Researcher Memos*	Process coding In vivo coding Axial coding Process coding In vivo coding Axial coding

Appendix C

Observation Protocol

Date of Observation: _____

Length of Observation: _____ minutes/hours

How many participants were observed? _____

How many students? _____

How many SI leaders? _____

Any other attendees? _____

Research Questions:

1. How do developmental education students make meaning of their experience in supplemental instruction?
    a. How do developmental education students experience identity, competence, and relationship building through supplemental instruction?
    b. What role does supplemental instruction play in how developmental education students' make meaning of their identity, competence, and relationship building?
2. What theory (theories) generates from exploring how supplemental instruction supports developmental education students' emotional needs?

Grand Tour Question: Think about your SI experience throughout the semester, and please describe your experience to me.

Interaction (How many times?)	**1st 10 Minutes**	**2nd 10 Minutes**	**3rd 10 Minutes**	**4th 10 Minutes**	**5th 10 Minutes**
Students with Students					
Students with SI Leader					
Students encourage each other					

Interaction (How many times?)	**1st 10 Minutes**	**2nd 10 Minutes**	**3rd 10 Minutes**	**4th 10 Minutes**	**5th 10 Minutes**
Students ask questions • Asked questions to SI leader • Asked questions to each other					

Category	✓	**Descriptive Notes**	**Reflective**
Do the students seem to rely on each other?	□		
Do the students seem to rely on the SI leader?	□		
Do the students seem to motivate each other?	□		
Do the students seem to encourage each other?	□		
Do the students seem to feel comfortable with each other?	□		
Do the students seem to feel comfortable with the SI leader?	□		
Is there any evidence of relationships?	□		

Category	□	Descriptive Notes	Reflective
Is there any evidence of Universality among the students?	□		
Are there any conversations or interactions not related to the course work?	□		

Appendix D

Theoretical Sampling Interview Protocol

1. You reported the other group members were your friends, describe how supplemental instruction helped to develop these friendships.
2. Tell me how you define friendship.
3. During the observations, the members of the group responded with care during emotional crises, tell me about how these interactions helped you to cope with your emotional stressors?
4. You stated that many of your group members have supported you in times of distress and are now your friends, tell me how their support led to friendship.
5. During the observations, you seemed to receive a lot of emotional support from your peers, tell me how this has helped you…
    a. Emotionally
    b. Academically
6. I noticed during one of the SI session you….
    a. Discussed financial struggles, tell me about those struggles and how they affect you.
7. You discussed (Immigration, Raising children, Domestic Violence, Surviving Trauma, Work, Challenging home environment, Worrying about failure, Family needs, Culture, Language) as areas where you have difficulties or issues… how do these areas hinder your learning process?
8. You referred to the SI leader as “letting” you and your peers work with each other and help each other, tell me what you mean by “she let you.”

9. You identified your SI leader, your professor, and/or your peers as helpful and supportive, tell me how each helps and supports you.
    a. What are some ways that your [peers, SI leader, professor] are helpful.
10. You stated that [peers, SI leader, professor] are caring, elaborate on what you mean by caring.
11. You spoke about your language being a problem for you understanding the material in class, tell me who supports you in overcoming your language barriers?
    a. How does your [SI leader, peers, the group] help you overcome feeling insecure about your language?