

UCLA

UCLA Electronic Theses and Dissertations

Title

Addressing Transfer Shock: How Community College Transfer Students Develop Peer-to-Peer Social Connections at a Four-Year University

Permalink

<https://escholarship.org/uc/item/5q8632zk>

Author

Shayestehpour, Anousheh

Publication Date

2020

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA

Los Angeles

Addressing Transfer Shock:

How Community College Transfer Students Develop
Peer-to-Peer Social Connections at a Four-Year University

A dissertation submitted in partial satisfaction of the
requirements for the degree Doctor of Education

by

Anousheh Shayestehpour

2020

ABSTRACT OF THE DISSERTATION

Addressing Transfer Shock:
How Community College Transfer Students Develop
Peer-to-Peer Social Connections at a Four-Year University

by

Anousheh Shayestehpour

Doctor of Education

University of California, Los Angeles, 2020

Professor Robert T. Teranishi, Chair

Through in-depth interviews and written reflections, this study investigated how community college transfer students at a large, public, four-year, research university developed social connections with their in-class peers, their perceptions of how these social connections influenced their resilience, and the role of the institution in peer-to-peer social connection making. Research suggested that transfer students who experience a sharp drop in GPA during their first-term at the university, a phenomenon known as *transfer shock*, were more likely to drop out if the dip was not corrected within the next academic term (Hills, 1965). Transfer students who developed social connections and a sense of belonging to their new institution during their first term were more likely to perform better in their coursework and avoid transfer

shock. Current literature on the social integration of community college transfer students focused on formal interventions such as orientations and mentorship programs, or student participation in university extra-curricular activities including events or clubs. This study uncovered how social connections between community college transfer students formed outside of participation in extra-curricular activities in order to address the limitations of this typically commuter population.

This dissertation presented findings based on the personal stories of six male and six female community college transfer students who were commuters between the ages of 19-26, representing both STEM and non-STEM majors. This study found that peer-to-peer social connections formed outside of extra-curricular activities were established primarily in or around the classroom. The participant narratives confirmed social connections to native and transfer student classmates played a positive role in their transition within and to the four-year university. Such social connections provided access to shared academic resources and unique navigational capital which supported participant resilience (academic and emotional persistence over time leading to on-time graduation). The institution was perceived as having facilitated the development of peer-to-peer social connections when academic programs were designed so that students were likely to share multiple classes in the same term and/or when collaborative work was integrated into course curriculum. This dissertation concluded with recommendations for four-year institutions on the ways in which the classroom can serve as an effective and supportive environment for peer-to-peer social connection making.

The dissertation of Anousheh Shayestehpour is approved.

Diane Durkin

Mark Kevin Eagan

Patricia M. McDonough

Robert T. Teranishi, Committee Chair

University of California, Los Angeles

2020

DEDICATION

I dedicate this study to all the community college transfer students who persevered through the emotional, physical, and academic challenges of their post-secondary journey, but also to those who tried yet failed to successfully transition to the four-year university. This study is also dedicated to the teachers throughout my life who modeled effective pedagogy and designed curricula that is engaging, collaborative, and takes student psychological needs into consideration. Finally, I dedicate this dissertation to my mother who raised me to value education above all else and who sacrificed so much for me to fulfill my dream of completing a doctoral program at UCLA. Thank you for everything, Mom.

TABLE OF CONTENTS

ABSTRACT OF THE DISSERTATION	ii
DEDICATION	v
TABLE OF CONTENTS	vi
LIST OF FIGURES	viii
LIST OF TABLES	ix
ACKNOWLEDGEMENTS	x
VITA	xi
CHAPTER 1: STATEMENT OF THE PROBLEM	1
Background of the Problem	2
The Rise in Post-Secondary Enrollments	2
Community College Transfer Students: An Issue of Equity	3
Tracking Efforts at the Four-Year Institution	4
Transfer Shock	5
The Research Project	6
Research Questions	7
Research Design.....	7
Significance of the Study	8
Definition of Key Terms	9
CHAPTER 2: A REVIEW OF THE LITERATURE	11
Conceptual Framework: Tinto's Model of Student Integration	11
Transition Barriers	13
Transition Anxiety	13
Sense of Belonging	14
Navigational Capital	15
Existing Interventions	16
Transfer Student Orientation.....	17
Transfer Mentorship and Support Programs	18
Transfer Student Centers.....	20
Time Spent on Campus	21
Social Capital	22
Social Networks	23
Friendship Making	23
CHAPTER 3: METHODOLOGY	25
Research Design	25
Research Site.....	26
Participant Criteria	28
Recruitment.....	28
Sample.....	31
Data Collection Methods	32
Individual Interviews	32
Written Reflection.....	34
Data Analysis Methods	35
Ethical Issues	36
Credibility & Trustworthiness	37

CHAPTER 4: FINDINGS	38
Peer-to-Peer Social Connections are Established In or Around the Classroom.....	39
Proximity, Recognition, and Repeated Exposure Facilitates Initial Contact.....	39
Academic and Personal Relatability Facilitates Continued Contact.....	41
Academic Relatability.....	41
Personal Relatability	43
The Role of Peer-to-Peer Social Connections in Transition and Resilience	45
Social Connections with any Peer, Regardless of the Level of Contact, Alleviates Loneliness	46
Social Connections with Classmates Reduces Feelings of Imposter Syndrome	48
Social Connections with Native Students Significantly Increases Sense of Belonging and Navigational Capital	51
Social Connections Support Motivation and Achievement in Shared Classes.....	54
The Role of the Institution in Peer-to-Peer Social Connection Making	56
Programs with Lab and/or Discussion Requirements Facilitate Social Connections	57
Instructors and Collaborative Work Influence Social Connection Making.....	58
Summary of Findings	60
CHAPTER 5.....	63
Discussion.....	64
The Development of Peer-to-Peer Social Connections.....	65
Social Connections and Resilience	66
Transition Anxiety	67
Imposter Syndrome.....	67
Loneliness and Isolation	68
Social Connections and Achievement	69
Implications and Recommendations for Practice	70
The Role of the Instructor: Creating Community in the Classroom.....	71
Explicitly Addressing Imposter Syndrome.....	71
The Role of the Institution: Taking Steps to Address Social Integration in the 21 st Century	72
Facilitating Relatability and Connections between Transfer and Native Students	72
Supporting Collaborative Learning Opportunities (In-Person and Online).....	73
Limitations.....	74
Suggestions for Future Research.....	75
APPENDIX.....	76
REFERENCES.....	88

LIST OF FIGURES

Figure 1. Tinto's Model of Student Integration (1975)

Figure 2. Model of Community College Transfer Student Integration

Figure 3. Mechanism and Function of School Based Bonds

LIST OF TABLES

Table 1. Characteristics of Intake Form Respondents

Table 2. Characteristics of Final Participant Sample (sorted by major)

ACKNOWLEDGEMENTS

This dissertation would not have been possible without the support of the entire faculty and staff of the UCLA Educational Leadership Program (ELP), my dissertation committee, my fellow classmates, family, and friends. I want to acknowledge Dr. Jack Plotkin and Dr. Diane Durkin who worked with me through the grueling dissertation development process. A special thanks to Dr. Patricia McDonough for taking the time to give me detailed feedback and guidance on my dissertation. And to my dissertation chair, Dr. Robert Teranishi, thank you for support, expertise, and guidance throughout this demanding process.

VITA

2006 Associate of Arts, Liberal Arts
Northern Virginia Community College
Annandale, VA

2007 – 2009 Aquatics Director
Sport & Health Clubs
Alexandria, VA

2008 Bachelor of Arts, Communications
George Mason University
Fairfax, VA

2009 – 2010 Communications Manager
Office of the Chief of the National Guard Bureau
Department of Defense, Pentagon, VA

2011 Master of Education, Secondary English
George Washington University
Washington, DC

2011 – 2012 Director of the Academic Center for Reading & Writing
Northern Virginia Community College
Alexandria, VA

2012 – 2014 Secondary English Teacher
Arlington Public Schools
Arlington, VA

2014 – 2015 College Coordinator
Neighborhood Youth Association
Venice, CA

2015 – 2017 Program Manager
Custom Programs & Corporate Education, UCLA Extension
Los Angeles, CA

2018 – present Program Manager
Osher Lifelong Learning Institute (OLLI) at UCLA
Los Angeles, CA

CHAPTER ONE: STATEMENT OF THE PROBLEM

As technology rapidly advanced during the last fifty years, so did the skills and knowledge required to be a part of an advanced global workforce. Over the last decade, nearly 95% of new jobs being created required a post-secondary degree, 70% of high school students in the United States enrolled in some form of post-secondary education, and most people anticipated needing a bachelor's degree to ensure their financial stability (Carnevale et. al, 2016). 80% of all post-secondary students in the United States enrolled in community colleges, which included large populations of racial and ethnic minorities, low-income, first-generation, and non-traditional age students (Venezia & Kirst, 2005; Shapiro et. al, 2017a). For students who did not have the means to attend a four-year university after high school, community colleges provided an equitable pathway to a bachelor's degree. However, when these students arrived at the four-year university, they faced unique transition barriers which increased their risk of academic failure regardless of success at the community college (Shapiro et. al, 2017b).

Between 2010 to 2016, 31.5% of community college students in the U.S. successfully transferred to a four-year institution, but only 42% of those students successfully completed their baccalaureate program *on-time* (within six years of beginning their post-secondary studies) (Shapiro et. al, 2017b). In comparison, 60% of *native students* (those who completed their bachelor's program at the same institution where they started) graduated within the same six-year window (Ginder et. al, 2018; Shapiro et. al, 2017a). Overall, only 13% of all community college students successfully transferred to and completed a baccalaureate program within six years of beginning their post-secondary studies (Ginder et. al, 2018; Shapiro et. al, 2017a). This disparity between success rates of community college transfer students and native students at the four-year university suggested a need for further research on factors influencing community

college transfer student *resilience* (academic and emotional persistence over time leading to on-time graduation).

Decades of research on transfer students found that social adjustment as well as academic adjustment were required for successful transition within and to the four-year university (Tinto, 1975; Astin, 1984; Laanan, 2004; Young & Litzler, 2013). More recent studies on community college transfer students confirmed that this population felt current transition services (e.g. transfer student orientation, counselors, etc.) did not provide them with the sense of belonging necessary to feel socially integrated into their new environment (Cejda, 1994; Laanan, 2001; Eggleston and Laanan, 2001). Tinto's (1993) theory of undergraduate retention stated that students did not persist at an institution where they did not have a strong sense of belonging. Despite the wide range of research that has validated the role of social integration in student persistence, interventions across transfer student literature focused heavily on participation in voluntary formal interventions (such as mentorship programs) or participation in extra-curricular activities (such as social events or campus clubs). Studies on how transfer students developed peer-to-peer social connections outside of participation in extra-curricular activities were extremely limited. This project investigated how community college transfer students at a four-year university developed social connections with their peers at the university on their own, the role of these connections on transition and resilience, and the ways in which the institution facilitated or undermined the development of such peer-to-peer social connections.

Background of the Problem

The Rise in Post-Secondary Enrollments

Between 2000 and 2017, total undergraduate enrollment in the U.S. increased 27% from 13.2 million to 16.8 million students (U.S. Department of Education, 2019). In 2010, President

Obama set a goal for the United States to have the highest proportion of college graduates in the world by 2020 (US Department of Education, 2011). The U.S. Department of Education recognized this step as a formal shift to a college for all economy and projected that undergraduate enrollment in the United States would reach 17.2 million students by 2028, with 2-year institutions expected to grow 1% faster than four-year institutions (U.S. Department of Education, 2019). Growth in post-secondary enrollments resulted in growing numbers of community colleges nationwide, with approximately 1,462 community colleges currently active in the United States.; 1,047 public and 415 private (Shapiro, et. al, 2017b). In 2018, community colleges served 89% of all students enrolled in 2-year institutions (CCRC, 2019). As post-secondary enrollments grew, so did the diversity of the post-secondary student population. From 1976 to 2015 the population of Black, Hispanic, and Asian/Pacific Islander populations enrolling in degree granting post-secondary institutions increased by 3-4% in each category (Shapiro, et. al, 2017b). Large percentages of first-generation, minority, low-income, and non-traditional students enrolled in community colleges as their first post-secondary institution; community colleges provided these underrepresented populations with access to a post-secondary education, a bachelor's degree, and thus, social mobility (Laanan & ERIC, 2001; Laanan et. al, 2010; Townsend, 1995).

Community College Transfer Students: An Issue of Equity

In 2014, nearly half of all bachelor's degree recipients were community college transfer students (Shapiro et al., 2017b). Close to half of all Black and Hispanic students enrolled in four-year institutions started at a 2-year public college, compared to a third of White and Asian students (Shapiro et al, 2017); 38% of first-generation students and 44% of low-income students (less than \$25,000/year) attended community colleges as their first postsecondary institution,

compared to 20% of students with college educated parents (Ginder, Kelly-Reid, & Mann, 2018). Community colleges appealed to these populations because they offered more options for campus locations, flexible course schedules, and lower prices so that students could continue to live at home and/or work while in school (Shaw & Chin-Newman, 2017). Community colleges responded to the needs of their diverse student body by focusing efforts on academically preparing all students for transfer to a four-year institution

After a 2003 study by the US Department of Education found only 15% of community college students who planned to transfer to a four-year institution did so within three years, many states enacted articulation agreements between their community colleges and public four-year institutions to support the successful transfer of more students at a faster rate (Horn, 2009). With nearly three million community college students in California alone, public four-year universities in the state also made efforts to support this population (Blaylock & Bresciani, 2011). The California State University (CSU) and University of California (UC) systems both made formal changes to increase the acceptance and support of students transferring from California community colleges. For example, between 2002 and 2018, the number of transfer applicants at UCs grew from 11,955 to 23,756 and in 2018, 92% of all transfer students admitted to the UC system came from a California community college (UCLA, 2018). While four-year institutions recognized the value of community college transfer students, they were not required to track and report transfer student graduation rates to the federal government until 2010 (Ginder et. al, 2017).

Tracking Efforts at the Four-Year Institution. In 2010, the U.S. Department of Education revised their Integrated Post-Secondary Data System (IPEDS) database to include tools to measure postsecondary outcomes for transfer students (Ginder et. al, 2017). From 2009-

2017, the US Department of Education's National Center for Education Statistics (NCES) collected data on the four, six, and eight year graduation rates of those transfer students who began their post-secondary studies from July 1, 2009 through June 30, 2010, creating the first ever national data report of this kind on transfer student success rates (Ginder et al, 2017). While the US Department of Education report did not distinguish between transfer students from community colleges and those from other institutions, it confirmed that transfer students are less likely to complete their bachelor's degree on-time than their non-transfer peers. It also confirmed findings from previous research that student achievement and involvement at the community college did not correlate to success at the four-year institution (Townsend, 1995; Townsend & Wilson, 2006, 2008). Literature on transfer students suggested a phenomenon known as *transfer shock* could account for the lower achievement rates of transfer students at the four-year university.

Transfer Shock

Hills (1965) first identified a phenomenon known as *transfer shock* after studying 46 data sets on community college transfer students and their achievement at the four-year university. He discovered that that transfer students, in particular community college transfer students, were susceptible to a sharp decline in GPA during their first term at the university regardless of their academic performance at the community college (Hills, 1965). Further research on transfer shock found community college transfer students who corrected this decline in GPA within their first two terms at the university were more likely to perform similarly to native students, persist academically, and graduate on-time; the longer it took to correct their transfer shock the more likely it was that the community college transfer student would drop-out (Hills, 1965; Glass & Harrington, 2002; Lockwood, Hunt, Matlack, & Kelley, 2013; Ivins et. al, 2016). For students

who major in STEM (science, technology, engineering, and mathematics) the drop in GPA during their first-term was more probable and increased the likelihood they would leave the STEM field or the university altogether (Cejda, 1997; Townley et. al, 2013; Lockwood, Hunt, Matlack, & Kelley, 2013).

In addition to academic major, factors such as age, gender, race, employment, and marital status were also found to play minor roles in transfer shock (Rhine et. al, 2000; Thurmond, 2007). Regardless of these factors, research indicated that all community college transfer students experienced transfer shock at a higher rate than other forms of transfer students (Zhai and Newcomb, 2000; Schmidt and Wartick, 2013). Studies on student transition, friendships, and transfer student needs suggested social connections were the most effective mechanism to cope with new environments quickly, develop sense of belonging to the four-year institution, and avoid transfer shock (Bramston et. al, 2005; Townsend and Wilson, 2006; Estell et. al, 2009).

The Research Project

Uncovering experiences from students themselves, this study investigated how community college transfer students developed social connections with their peers at the four-year university outside of participation in extra-curricular activities, the perceived role of these connections on student resilience, and the role of the institution in supporting peer-to-peer social connections for their community college transfer student population. First, the process of how students established such social connections with their peers is explored. Next, student perceptions of the role of these connections on their transition, academic and emotional resilience were investigated. Lastly, student perceptions of institutional factors influencing peer-to-peer social connection making were studied.

Research Questions

This study asked, how do community college transfer students establish social connections with their peers at the four-year university that help them successfully transition into and complete their bachelor's degree on time? Three research questions guided this study:

1. What are the ways in which community college transfer students form social connections with their peers at the four-year university outside of extra-curricular activities?
2. According to community college transfer students, what role do social connections play in their transition to the four-year university and their resilience?
3. How does the four-year university facilitate or undermine the development of social connections between community college transfer students and their peers?

Research Design

This qualitative research study explored participant experiences surrounding the process of forming social connections with their university peers. This simple, qualitative study design gathered rich, descriptive data from in-depth, individual interviews and student written reflections. Qualitative research is interested in people's interpretations of their experiences, what they mean, and how they construct their world (Merriam & Tisdell, 2016). This approach addressed meaning, context, and process and was appropriate for documenting processes which occurred naturally in a given environment (Creswell & Creswell, 2018). A quantitative method would not be appropriate for understanding conceptual processes nor would it have provided the rich, descriptive participant narrative required to answer the research questions.

A simple qualitative study allowed the researcher to gather first-hand accounts from community college transfer students who did not experience transfer shock and who formed

peer-to-peer social connections within their first-term at the university outside of extra-curricular activities. A series of thought-provoking reflection activities allowed the research to collect rich, qualitative data from which common themes of significance emerged.

Significance of the Study

This study was significant in providing insight into how community college transfer students develop peer-to-peer social connections that support their resilience and on-time graduation, a major gap in the existing literature on transfer students. This study also provided important analyses of the relationships between community college transfer students to both transfer and native students at the four-year university. From these findings emerged recommendations for how four-year universities can best support the development of peer-to-peer social connections within the classroom. Public, four-year institutions were the main audience for this study because of their continued efforts to admit greater numbers of community college transfer students through formal efforts such as articulation agreements with local community colleges. As four-year institutions prepare to admit more community college transfer students each year, understanding and addressing the transition needs of these students will be imperative to improving accountability in higher education by providing this diverse population with equitable outcomes and improving the four-year institution's overall success.

Definition of Key Terms

The following terms appeared throughout this study. Their definitions in the context of this study are provided below.

Community College Transfer Student: a post-secondary student enrolled in a four-year degree granting institution who attended community college through the end of their sophomore year and transferred to a four-year institution at the start of their junior year of studies.

Commuter: a student who does not live on-campus or in any student housing; they live off-campus in a personal residence and commute to and from the post-secondary institution.

Native Student: a student who enters a four-year university as a first year student and does not change institutions; a student who completes their bachelors' degree at the same institution where they began their post-secondary studies.

On-Time Graduation: a student who is on track to or has completed their bachelor's degree program within six years of beginning their post-secondary studies.

Peer-to-Peer Social Connection: connections between two or more students at university which are formed outside of participation in university extra-curricular activities, such as mentorship programs, events, or clubs.

Student Resilience: academic and emotional persistence over time that leads to on-time graduation from the four-year university.

Transfer Shock: a sudden drop in GPA of over 1 point during a transfer student's first term at the four-year institution, that if not corrected, increases the likelihood of student drop-out (Hills, 1965).

Successful Community College Transfer Student: a community college student who has transferred to a four-year degree-granting institution and is achieving on track to complete their bachelor's program on-time (within six years of beginning their post-secondary studies).

Friendships: a type of social connection characterized by an emotional bond between two individuals that provides those individuals with mutual enjoyment and shared intimate interactions (Howes, 1983)

Social Network: a group of individuals in an organization who share resources with each other for individual and/or collective success, such as the sharing of human capital (knowledge or skills) and physical capital (equipment or tools) (Bourdieu, 1986).

STEM: undergraduate fields of study in the areas of science, technology, engineering, and mathematics. For this study, social sciences were not identified as STEM majors.

Navigational Capital: knowledge and familiarity of institutional processes and resources.

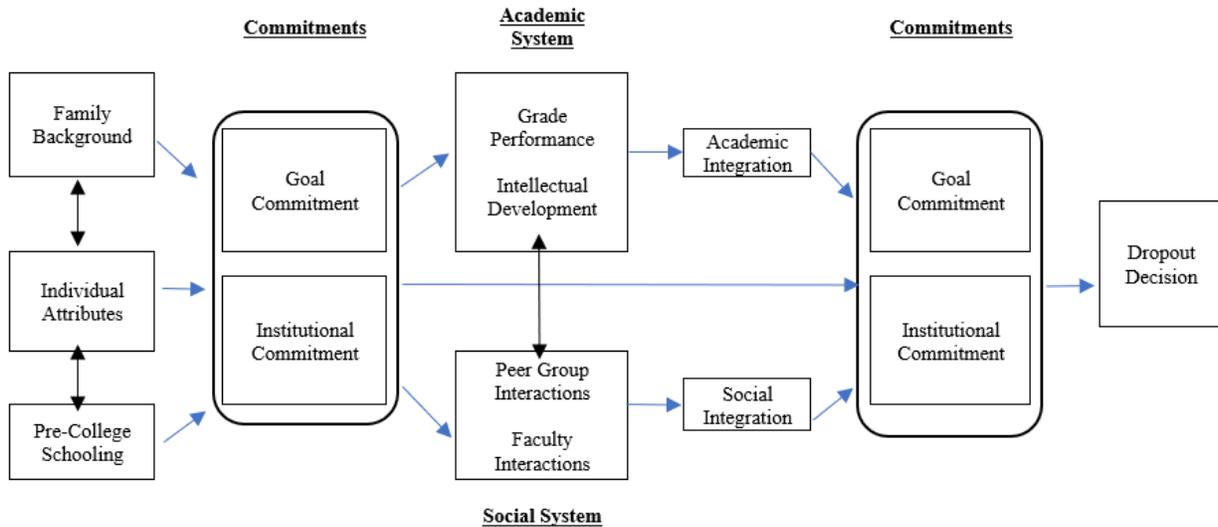
CHAPTER 2: A REVIEW OF THE LITERATURE

Studies on community college transfer students revealed they face unique transition barriers upon arriving at the four-year university, especially regarding their social adjustment. To better understand this issue, this chapter first examines Tinto's (1975) model of student integration, the conceptual framework for this study. Next, existing literature on transition barriers unique to community college transfer is reviewed: transition anxiety, sense of belonging, and navigational capital. The review then assesses existing interventions designed to support transfer student sense of belonging and their gaps in service: orientations, mentorship and bridge programs, transfer student centers, and time spent on campus. Finally, the review explores existing research on social capital theory, social networks, and friendship making.

Conceptual Framework: Tinto's Model of Student Integration

To better understand and explore transfer shock, Tinto (1975) developed a student integration model (Figure 1) which acted as the conceptual framework for this study. This model was developed after Tinto analyzed student persistence in a program and concluded it was based on both prior academic experience and social integration. Tinto's work on student persistence and attrition (1993, 1998) was shaped by Spady (1970) who studied the relationship between social integration and suicidal tendencies. Spady believed that the same characteristics which influenced suicidal tendencies influenced student attrition, such as lack of friendship and support systems (1970). Tinto believed social integration was more critical than academic preparation to student retention in higher education, and that individual attrition or departure from higher education arose from several major causes, including adjustment, isolation, and financial aid (1993). Much of the research regarding student success in higher education since 1975 has been based on Tinto's model and confirmed the role of social integration in student resilience.

Figure 1. Tinto's Model of Student Integration (1975)



According to Tinto's model, student interactions both inside and outside of the classroom evolved their sense of belonging to the institution (consciously or subconsciously) which dictated their decision to commit to academic goals or drop out. Tinto claimed that when students felt they shared values with their fellow peers, they also felt their values aligned with those of the institution which facilitated sense of belonging (Tinto, 1993, 2017). Additional studies in recent years also found that connections with peers, faculty, and staff decreased students' feelings of loneliness, increased levels of student retention, improved GPA, lowered stress levels, improved mental and physical health and increased overall life satisfaction (Laanan, 2004; Jackson & Laanan, 2015; Tinto, 2017; Shaw & Chin-Newman, 2017; Xu et. al, 2017). When community college transfer students developed social connections at the four-year university, they reported feeling supported enough to be able to navigate the institution and persist (Harris, 2017; Astin, 1993; Tinto, 1993). However, a review of typical orientation and counseling programs for transfer students in the United States indicated that transition services focused on introducing

transfer students to the institution's course management, registration, and financial aid programs, not their social or psychological adjustment needs.

Transition Barriers

Studies on community college transfer students revealed they faced a unique set of transition barriers that impacted their adjustment to the four-year university due to the nature and timing of their transition. Community college transfer students suffered from transition anxiety about both the physical and academic adjustment to the university. Development of sense of belonging was another barrier reported by this population due to feelings of loss and loneliness. Lack of navigational capital typically gained through social connections with native students was the final major barrier cited by community college transfer students.

Transition Anxiety

Qualitative studies of community college transfer students found that transition anxieties were generally tied to feelings of uncertainty about the four-year institution. Four-year institutions were typically much larger and denser than the two-year institution, and this physical adjustment from the small, familiar environment of the community college to the larger, unfamiliar environment of the university was intimidating, especially for those students transferring to research universities where faculty were perceived as inaccessible (De Wine et. al, 2017). In addition to anxiety about the physical adjustment, community college transfer students expressed worries about their academic adjustment. They felt that the community college was perceived as less rigorous than the university, that faculty were more distant from them because of this stigma, and that they were not confident in their ability to succeed academically, regardless of how well they performed at the community college (Miller; 2009; Chin-Newman & Shaw, 2013; Shaw & Chin-Newman, 2017; De Wine et. al, 2017). The timing

of this transition, typically at the junior year, also increased general transition anxiety because of the awareness that more challenging senior-level coursework would be introduced in an unfamiliar environment and without established connections to peers and faculty.

Sense of Belonging

The literature on community college transfer students revealed they worried about finding friends and feeling a sense of belonging to the four-year institution (Jackson & Laanan, 2015; Chin-Newman & Shaw, 2013; Shaw & Chin-Newman, 2017; Xu et. al, 2017; Miller, 2013). These community college students across various qualitative studies said they feared being alone and isolated on campus. According to Mattanah et. al, (2012), loneliness occurs within three dimensions: 1) intimate loneliness: the absence of significant social supports like romantic partners or close friends; 2) relational loneliness: the absence of extended supports like family; and 3) collective loneliness: the absence of a community support networks like those found in school or work (Mattanah et al., 2012). Community college transfer students were unique from other transfer students at the university because they experienced all three forms of loneliness: they lost intimate connections to close friends, relational connections to family, and collective connections to the community college. The loss of all three forms of support systems exacerbated feelings of loneliness among community college transfer students which made it especially difficult to develop a sense of belonging to a new environment (Kearney et. al, 2018). For students whose family culture was also community based, like Latino students (the fastest growing community college student population in the U.S. and California), they perceived the transition to the four-year institution as especially difficult to overcome (Harris, 2017). While the support of their family and hometown friends was helpful in their motivation to enroll at the four-year institution, connections with peers, faculty, and staff at the four-year institution itself

were cited as the most effective method of decreasing feelings of loneliness, improving sense of belonging, and increasing the community college students' chances of succeeding academically (Xu et. al, 2017; Shaw & Chin-Newman, 2017).

The literature on community college transfer student sense of belonging suggested that social support networks, whether personal or academic, provided community college transfer students with the emotional support necessary to ease their transition anxiety and develop sense of belonging to their new institution (Miller, 2013; Xu et. al, 2017; Shaw & Chin-Newman, 2017). Community college transfer students felt the timing of their transition created a barrier to accessing peer-to-peer friendships because of the perception that native students established their friendship groups at the start of their freshman year. Community college transfer students who transferred in January (mid-year) felt that friendship groups among transfer students were established in the fall of each year which made it more difficult for them to establish social connections upon their arrival (Peska, 2009; Miller, 2013). Those community college transfer students who did not establish social connections with their native student peers also less likely to gain navigational capital that would ease their transition and improve their sense of belonging to a new environment.

Navigational Capital

Navigational capital, or the knowledge needed to effectively navigate an environment, was a major factor in the transition experience of community college transfer students (Davies & Casey, 1999). Familiarity with campus resources and processes helped ease community college transfer student adjustment to the four-year university and succeed academically (Jackson & Laanan, 2015; Xu et. al, 2017). Community college transfer students were faced with trying to navigate their new physical campus environment; they also attempted to adapt to new academic

processes while avoiding the risk of transfer shock caused by the increased demands of their upper-level coursework (Shaw & Chin-Newman, 2017; Xu et. al, 2017). Community college transfer students said unless they found someone else to help at the institution, they did not feel a sense of confidence navigating the new environment; connections with native students were especially helpful in providing navigational capital in the form of campus culture and guidance about student resources (Eggleston & Laanan, 2001; McGowan and Gawley, 2006; DeWine et. al, 2017, Xu et. al, 2017).

When faculty, staff, and fellow students on campus provided guidance to successful university navigation, community college transfer students gained navigational capital and reported feeling the most supported (Shaw & Chin-Newman, 2017; DeWine et. al, 2017; Xu et. al, 2017). Unfortunately, community college students reported having less time to spend on campus outside of classes to participate in extra-curricular activities with their peers or visit with faculty and staff in order to develop such social connections and acquire navigational capital (Berger & Malaney, 2001; Peska, 2009).

Existing Interventions

This section reviewed a summary of existing transition interventions targeted towards supporting transfer student transition to the four-year university, including socialization. These interventions included transfer student orientations, mentorship and bridge programs, transfer student centers, and time spent on campus. Pilot interviews with former community college transfer students who lived in transfer student housing and/or enrolled in a cohort style program revealed that this was the main mechanism to their social connection making and that the majority, if not all of their social connections were a result of such environments. It is not practical to assume that all transfer students can live in dorms with other students or that every

academic program can work in cohorts. For these reasons, students who live in university housing or who joined cohort programs were not considered as participants for the study.

Transfer Student Orientations

The standard onboarding process for new transfer students at a four-year university in the United States was a transfer student orientation. Community college transfer students enjoyed orientations because it gave them a chance to interact with fellow transfer students, but they consistently said they were too brief, condensed, not engaging enough, and not tailored to their needs (Eggleston & Laanan, 2001; Xu et. al, 2017; De Wine et. al, 2017). Transfer orientations and websites were helpful to introducing students to their new institution, but community college transfer students craved more robust transition programs that addressed their emotional adjustment, social integration needs, and sense of belonging (Cejda, 1994; Laanan, 2001; Eggleston and Laanan, 2001; De Wine et al., 2017; Shaw & Chin-Newman, 2017).

Studies on transfer student orientations found that staff also noted a need for unique orientation programs that address the emotional adjustment needs of the community college transfer student population and focused on social integration experiences, sense of belonging, and navigational capital (Miller, 2013; De Wine et. al, 2017). Staff and transfer students said social integration experiences were more influential to community college transfer student sense of belonging than their understanding of academic and financial aid resources that were the typical focus of orientations (Ginder et al., 2017; Shapiro et al., 2017b; Chin-Newman & Shaw, 2013). Online transfer students, a growing population each year, expressed that information websites did not substitute for an orientation experience and they had no form of accessing the information covered in-person nor had an opportunity to interact with other students which further reduced their feelings of belonging to the four-year institution (Xu et. al, 2017). Although

resources like transfer websites and transfer information sessions were recognized as helpful, significant in-person experiences remained the most effective interventions for developing sense of belonging and easing the transition of community college transfer students (De Wine et al., 2017; Shaw & Chin-Newman, 2017).

Transfer Mentorship and Support Programs

One transition intervention offered by some four-year institutions was to create a mentorship or support program specifically for transfer students, typically offered during or right before their first term. These programs targeted student academic and social integration as well as provided forms of navigational capital. One common student support program found across institutions in the United States is the mentorship model; two examples of transfer student mentorship programs are those provided by the University of California, Los Angeles (UCLA) and Rutgers University in New Jersey. Both institutions offered transfer mentorship programs that focused on helping new students navigate the campus with an assigned peer. Their approach offered a one-on-one model and provided the new transfer student with access to a senior transfer student who had volunteered to be a mentor. The focus of these mentorship programs was to provide new transfer students with support in maneuvering the physical campus as well as its services.

The College of Science at Texas A&M University created a similar program referred to as their “Transfer Learning Community” focused on helping transfer students develop a sense of belonging. Their model, also voluntary, assigned a senior transfer student to each junior transfer student for one-on-one social connections; they also increased social connection making and sense of community among transfer students by having activities for all the participants collectively. The collective activity was presented as an academic boot

camp that focused on transfer student goal setting, personal success skills, introducing campus resources and tips for preparing for exams through (Scott et. al, 2017). This boot camp was a one-day, three-hour session before the start of the student's first term followed by monthly meetings in small student groups with their classmate peers. This program saw a 2% increase in transfer student retention (Scott et. al, 2017). Similarly, the University of Albany in New York developed a "Transfer Transition Leader Program" where each new transfer student was assigned to a native student who acted as a guide that shared navigational capital and friendship (Jacobson et. al, 2017). In the University of Albany program, there was no large group component, but the one-on-one connection provided was to a native student rather than another transfer student.

In 2011, a summer bridge program designed specifically to support the transition of community college transfer students at a large, urban, public university in the United States was studied. This program was delivered as a three-unit course in the summer before the student's first term in the fall. Researchers studied this program through qualitative and quantitative measures and found the program structure provided community college transfer students with friendships, peer mentors, positive group interactions, and resources for information (Blaylock & Bresciani, 2011). Those students who completed the program had the highest GPA at the end of their first term compared to three similar groups of transfer students admitted from the same community colleges who did not participate in the program. 88.9% of participating students agreed that the program provided them with campus capital in the form of academic advising, library literacy, financial aid literacy, and peer-mentor relations (Blaylock & Bresciani, 2011). This program was designed so that staff, faculty, and student mentors were regularly present and available to talk to program participants (Blaylock & Bresicani, 2011). Community college

transfer students said the peer-mentors provided a calming level of trust that alleviated their transfer anxieties, provided advice on navigating campus, and suggestions for courses (Blaylock & Bresciani, 2011). The program, although highly effective at providing students with emotional support and navigational capital, required numerous cohort interactions in the form of daily activities/workshops, mentoring activities, and time from those involved; the program staff noted that finding other transfer students to participate as peer mentors was challenging due to the time demands, and that attendance was inconsistent (Blaylock & Bresciani, 2011).

Although mentorship and transfer specific programs were found to be highly effective in increasing student sense of belonging, GPA, and provided them with social connections, there were several challenges to hosting such programs. The major downside of single mentor models was that the transfer student was only connected to one other peer, rather than a network of students. An additional concern with relying on mentorship networks was their unpredictability; the characteristics of the mentors changed every year and the programs were voluntary.

Community college transfer students also said these programs were inaccessible to them because of added costs, time constraints, and they were logistically challenging on campus (Laanan et al., 2010; Townsend, 2008; Townsend & Wilson, 2006). The voluntary nature and time commitment of such an intervention made them unlikely to be accessible by all or most community college transfer students.

Transfer Student Centers

To create a transfer-receptive culture at the four-year university, research suggested that certain physical structures which support transfer student sense of belonging must exist in the institution (Ornelas & Solorzano, 2004; Jain et. al, 2011; Herrera and Jain, 2013). Transfer student centers were an example of such a structure; they acted as a central location for students

to gather on campus and access transfer student specific resources (Handel, 2013; Miller, 2013; Townsend & Wilson, 2006). These structures targeted the transfer students' need to connect with others and receive help with selecting and enrolling in the courses needed to graduate on time (Jain et. al, 2011; Herrera & Jain, 2013). Student centers (including those for other communities like LGBT or international students) were important tools for building community, increasing equity among students, and supporting student navigation of the university system (Blimling & Whitt, 1999; Brazzell & Reisser, 1999; Patton, 2010; Sandeen & Barr, 2014; Schlossberg, 1989). Although transfer student centers helped students develop a sense of belonging to the four-year institution, it kept them isolated within the transfer student population of the university and reduced the opportunities to interact with native students who could provide unique forms of navigational capital.

Time Spent on Campus

Tinto (1975) believed that student interactions outside the classroom were most influential to improving sense of belonging. In alignment with this finding, a ten-year longitudinal study by the National Student Clearinghouse showed that variables among community college transfer student cohorts, such as school geography (urban, suburban or rural), focus of community college (academic or occupational) and student socio-economic status, had minor impacts on transfer and graduation rates (variations of only 1.5 to 6 percent). The study found that the strongest correlation to student success at the four-year institution was the amount of time the community college transfer student spent on campus. Full time community college students were 14.8% more likely to successfully transfer to the four-year institution than their part-time counterparts as well as 24% percent more likely to complete a bachelor's degree within six years of beginning their post-secondary studies (Shapiro et. al, 2017b).

Community college transfer students said they had less time to spend on campus due to their increased academic workloads (De Wine et. al, 2017). A 2001 survey of 372 community college transfer students attending a large, public four-year university found the demands of their upper level coursework caused them to work less, study longer, and have overall less leisure time (Berger & Melaney). Study times increased from 13.61 hours/week at the community college to 18.10 hours/week at the university while time spent with family reduced from 12.17 hours/week to 8.74 hours/week (Berger & Melaney, 2001). The increased time spent on studies also resulted in less time spent at work; time spent working off-campus reduced from 18.07 hours/week to 10.53 hours/week (Berger & Melaney, 2001). Community college transfer students experienced an increase in academic workload that resulted in less personal time to spend on campus, with family, or at work, leaving time spent in the classroom as their main source of exposure to other students.

Social Capital

Like navigational capital, social capital appeared in the literature as a term to describe knowledge accrued from social connections. Literature on social capital theory claimed individuals mobilized into social relationships when sharing of resources helped them to achieve a desired purpose or complete a certain action (Lin, 2001). Knowledge and skills were examples of non-physical resources that were passed from person to person (also referred to as human capital); examples of physical resources that provided social capital included equipment or tools (Bourdieu, 1986; Coleman, 1988; Dika & Singh, 2002; Lin, 2001). These resources, which individuals could not acquire without connections with one another, facilitated social network development (Daly & Finnigan, 2011).

Social Networks

Literature on social networks, or groups of individuals sharing resources for mutual advancement, found they evolved over time in response to the nature and flow of resources within that network (Snijders et. al, 2007; Daly & Finnigan, 2011). Social network theory focused on organizations indicated several factors that encouraged connection making between individuals and social network growth. Individuals who interacted with other individuals repeatedly and in similar ways over time often formed a symbiotic evolution from the sharing of resources (Snijders et .al, 2007). *Balance theory* (or transitivity) referred to the natural tendency for people to create strong direct ties with those who were already connected to their existing friendships (Wasserman & Faust, 1998). *Homophily*, or the idea that ‘birds of a feather flock together,’ referred to people with similar attributes or characteristics forming ties at higher rates than people with dissimilar attributes, (Kossinets & Watts, 2006; McPherson et. al, 2001). These tendencies occurred because people naturally wanted to reduce uncertainty: “As a relationship between two actors develops, the level of uncertainty as to how the other will react in different situations will decline and the strength of the relationship will increase” (Daly & Finnigan, 2011). According to Lareau et. al (2018), sharing of resources for both the individual and collective success of the group also increased the likelihood of social network development.

Friendship Making

Like social networks, research on friendship described it as a mutually reciprocal process (Bukowski & Hosa, 1989). Howes (1983) described friendship as an emotional bond that provided those individuals involved with mutual enjoyment and shared interactions. Friendships were found to significantly improve a person’s emotional and physical wellbeing (Emerson & McVilly, 2004; Jobling et. al, 2000), had a direct impact on quality of life, and were considered

essential social interpersonal relationships (Schalock et. al, 2002; 2007). The positive or negative impact a friendship had on a person's life depended on the affiliations, intimacy, and social support the friendship provided (Ferrans & Powers, 1985; Sigstad et. al, 2005).

Friendships between individuals who participate in a shared environment, like students or colleagues, were found to increase feelings of community belongingness (Bramston et.al, 2005).

Characteristics of close, meaningful friendships were intimacy, security, closeness, reciprocity, and conflict (Bukowski et. al, 1994; Newcomb & Bagwell, 1995). Social connections, social networks, and friendships all shared a similar foundation: shared and reciprocal resources.

This research project explored how community college transfer students developed social connections with their peers, including those connections which would be considered social networks or friendships, and the manner in which these connections provided the students with shared resources and reciprocal support at the four-year university.

CHAPTER 3: METHODOLOGY

This study asked, how do community college transfer students establish social connections with their peers at the four-year university that help them successfully transition into and complete their bachelor's degree on time? The following research questions guided this study:

1. What are the ways in which community college transfer students form social connections with their peers at the four-year university outside of extra-curricular activities?
2. According to community college transfer students, what role do social connections play in their transition to the four-year university and their resilience?
3. How does the four-year university facilitate or undermine the development of social connections between community college transfer students and their peers?

Research Design

The experiences of twelve community college transfer students at a large four-year university were uncovered and analyzed with qualitative measures. A qualitative approach allowed the researcher to use participants' personal perspectives to construct meaning and identify major findings (Merriam & Tisdell, 2016). The study was conducted in a sequential manner; initial data from volunteer intake forms was reviewed and a sample was purposefully selected based on the specific participant criteria. Once the final participants were confirmed, the researcher reviewed the social connection information provided by the participants on their intake form with the participant to prepare for the in-depth interview. Once the interview was completed, each participant was sent a digital written reflection to complete for further data collection. All this data was analyzed and triangulated which produced the major findings noted

in chapter four. This design allowed the research to become familiar with the participants background and stories before the interview, which facilitated the storytelling process during data collection.

Research Site

Literature on transfer students noted that 73% of all community college transfer students chose to complete their baccalaureate studies at a public, four-year institution, but that those who attended public research institutions perceived the greatest difficulty developing social connections or sense of belonging (Shapiro et. al, 2017b; Berger & Melaney, 2011). The sample of community college transfer students in this study was drawn from a large, public, four-year research university to gather in the setting literature indicated posed the greatest transition barrier for community college transfer students. According to the Carnegie Classification of Institutions of Higher Education, there were 81 public R1 research or doctoral universities in the United States; the research site for this study is among one of them.

Located in a major metropolitan city in the United States, this university serves a diverse population of students, has a reputation for high academic expectations, and is internationally renowned for its research. In 2019, the university served a total of 45,921 students, 35,568 of which were undergraduate students. The racial diversity of the undergraduate student body was 27% White, 28% Asian, 22% Hispanic, 12% International, 6% two or more races, 3% African American, 2% race unknown, <1% Pacific Islander, and <1% American Indian / Alaska Native. This university had a highly competitive undergraduate admissions rate of 14% with over 3,000 undergraduate transfer students admitted each year, 90% of which transferred from community colleges. This institution began tracking transfer student outcomes in 2002 (seven years before the national tracking system was developed) and houses a dedicated transfer student center on

campus. Due to its highly competitive undergraduate admissions rate and prestigious national reputation, this institution drew students with strong GPA's. Hills (1965) found that regardless of achievement at the community college, transfer students who did not integrate socially into the university were at risk for transfer shock. This site was purposefully selected in order to understand the significance of peer-to-peer social connections in overcoming transition and achievement barriers faced by all community college transfer students, including academically confident ones. This large, public university was an ideal site for this study because of its diverse population, R1 status, high academic standards, and large population of community college transfer students.

Participant Criteria

Twelve community college transfer students were purposefully selected for this study who self-identified as having made social connections with their peers outside of extra-curricular activities and who were on-track to graduate within six years of beginning their post-secondary studies. The participant criteria limited students to the age range of 18-26 to focus on the growing population of students choosing community college as their first post-secondary institution after high school. This age range accounted for up to two years of variation for students who may have completed high school at 19 or 20 years old and/or those who chose to take a gap year after high school. To ensure the participants were on track to complete their bachelor's degree within the six-year window, only those students who avoided transfer shock in their first term at the four-year university were considered. This was established by comparing the student's final GPA at the community college to their first-term GPA at the university; a drop in GPA of over 1.0 was considered to be a significant and qualified as transfer shock (Hills, 1965). As noted in chapter two, this study purposefully excluded those community college

transfer students who lived in university or transfer student housing because that is where they were most likely to establish peer-to-peer social connections; the final sample of this study therefore resulted in exclusively commuter students.

Recruitment. Working with the director of the university's transfer office, a recruitment flyer for the study was posted in the transfer student center and posted on their Facebook and Instagram pages weekly during the month of November 2019. The researcher also posted physical flyers in the bulletin boards of the largest STEM and humanities buildings on campus, the main dining hall at the university, the student center, outside the financial aid office and the counseling center. On these flyers, an incentive of a \$25 Amazon gift card was advertised to help recruit participants. In the consent forms for the study, the researcher explained that the gift cards would be provided at the completion of their participation in the interview (since the researcher would not be seeing the participant in-person again after their interviews). The researcher created a short form that recorded the name and gift card numbers for each participant which was signed and dated by the participant at the end of their individual interview. This form was stored with the other confidential documentation for this study in a locked cabinet at the researcher's office.

On the recruitment flyers, interested students were asked to complete a confidential intake form online to see if they qualified for this study (Appendix A). This intake form collected information on the students' studies at the community colleges and the four-year university which included academic major(s), GPA, and total length of study. It also asked about gender, employment status while in school, participation in university extra-curricular activities and commuter status. In addition, the form included short answer questions about when, where, and how the community college transfer student developed up to five social connections with

their peers at the university. See Table 1 for a detailed breakdown of the intake form respondents.

Table 1. Characteristics of Intake Form Respondents

	All Respondents (N = 97)
Age	
18-26 years old	90 (93%)
26-30 years old	4 (4%)
31-45 years old	3 (3%)
Gender	
Female	76 (78%)
Male	21 (22%)
Employment Status	
Part-Time (on-campus)	29 (30%)
Part-Time (off-campus)	21 (22%)
Not Employed	47 (48%)
Commuter Status	
Commuter (never lived on-campus)	29 (30%)
Lives on campus	68 (70%)
Major	
Arts & Humanities	32 (33%)
Social Sciences	37 (38%)
Science, Technology, Engineering, & Mathematics (STEM)	28 (29%)
GPA	
3.5-4.0	65 (67%)
3.0-3.4	28 (29%)
2.5-2.9	3 (3%)
2.1-2.4	1 (1%)
University Standing	
Junior	30 (31%)
Senior	67 (69%)
Total Length of Study	
4-6 years	90 (93%)
7-9 years	7 (7%)
Transfer Shock (dip in GPA to 3.0 or lower after transfer to university)	
Yes	91 (94%)
No	6 (6%)
Participation in Campus Clubs	
Yes	85 (88%)
No	12 (12%)
Social Connection Origins Cited (multiple responses per individual)	
Shared Class	53 (54%)
On-Campus Housing	53 (54%)
University Club or Event	47 (48%)
Transfer Student Orientation	22 (23%)
Transfer Student Programs/Events	17 (19%)
Facebook Groups	9 (9%)
Transfer Student Center	5 (5%)
On-Campus Dining Halls	5 (5%)

Sample

Of the 97 individuals who completed the intake form, only eighteen fit the narrow participant criteria for this study. From those eighteen, twelve agreed to participate in the study. Of these twelve, six were male and six were female; four belonged to STEM majors, five to the social sciences, and two from the humanities. Ten participants were U.S. born, in-state students that grew up within 100 miles of the four-year university and two were international students that attended community colleges located in the same city as the university. While race and socio-economic status were not analyzed as variables in this study, the sample consisted of White, Asian, Latinx, and multi-racial student backgrounds and all participants noted cost as a major factor in their decision to enroll in community college as their first post-secondary institution. While a minimum GPA was not part of the criteria, everyone in the sample graduated from community college with GPA of 3.0 or higher and did not experience transfer shock (a drop in GPA of over 1.0 after transfer to the university). Please see Table 2 for more details.

Table 2. Characteristics of Final Sample (sorted by major).

Name+	Age	Gender	Standing	GPA (CC*)	GPA (U**)	Major	Employment Status
Carol	22	Female	Senior	4.0	4.0	Biochemistry (STEM)	Not working
Reggie	23	Male	Senior	3.9	4.0	Biology (STEM)	Part-Time
Daniel	23	Male	Junior	3.6	3.0	Chicano Studies (Humanities)	Part-Time
Kevin	20	Male	Junior	3.9	3.9	Cognitive Science (STEM)	Not working
Earl	22	Male	Junior	3.8	3.8	Computer Science & Engineering (STEM)	Not working
Naomi	26	Female	Senior	3.9	3.8	English (Humanities)	Part-Time
Aaron	22	Male	Senior	3.9	3.7	Electrical Engineering (STEM)	Not working
Lisa	22	Female	Senior	3.9	3.3	Global Studies (Social Sciences)	Not Working
Melissa	22	Female	Junior	4.0	4.0	Political Science (Social Sciences)	Not working
Grace	21	Female	Senior	4.0	3.7	Psychology (Social Sciences)	Part-Time
Carson	21	Male	Senior	3.9	4.0	Psychology (Social Sciences)	Not working
Tammy	19	Female	Junior	3.9	4.0	Sociology (Social Sciences)	Part-Time

+ names have been changed to protect participant identity

* Community College

**Four-Year University

Data Collection Methods

The intake form completed by all interested volunteers for the study was available for a one-month period from November 1 – 30, 2019. In early December, the researcher reviewed the forms to identify those who met the participant criteria and schedule interview dates. Between December 2019 and February 2020, the researcher completed a 60-90 minute in-depth, individual interview with each of the twelve participants in-person; these took place at a private office space off-campus or in a reserved study-room on-campus depending on participant preference. The interviews were audio recorded, transcribed, and annotated; afterwards the researcher emailed a digital written reflection assignment to each participant that was to be completed over the course of several weeks. In March 2020, the university was forced to close its campus due to the COVID-19 pandemic and stay-at-home order put in place by the state. The chaos that surrounded this time resulted in the researcher not receiving the written reflections from the last four participants, although multiple attempts were made to contact those participants. The goal of the written reflections was to allow the participants additional time to reflect and expand upon the answers they provided in their interviews, so the lack of four reflections did not prevent the research questions from being answered.

Individual Interviews. The researcher met in-person with each participant to introduce themselves, review the purpose of the study, and conduct a 60-90-minute in-depth, individual interviews based on a general interview protocol (Appendix C). Pilot interviews with recent graduates from the research site who identified as community college transfer students were conducted prior to the study to finalize this general interview protocol. Because the participants had been asked to provide information on up to five social connections on their intake forms, the researcher reviewed these connections with each participant in-person on the day of the

interview. The participants confirmed they did not know the social connections which would be studied before transferring to the university and that they met outside of participation in extra-curricular activities.

At the start of each interview, the researcher asked each participant to share why they chose community college as their first post-secondary institution, why they chose to transfer to the research site, and how they came to decide upon their academic major. Next, the participant was asked to recall their experience at the mandatory one-day transfer student orientation hosted by the university to assist in the recalling of their feelings as a new transfer student at the university.

The interview protocol consisted of a series of open-ended questions about each social connection with additional probing questions posed based on the individual's responses. The objective of this process was to establish how each social connection developed in clear steps. Broader questions about the origin of each connection were posed first, followed by clarifying questions about the type of connection and the people involved. Probing questions about the process of forming relationships focused on communication exchanges between students, meaningful experiences shared inside and outside the classroom, and the mechanisms that facilitated or undermined the development of these meaningful relationships. When digital tools (cell phones and social media) or physical spaces on campus (dining halls or dorms) were mentioned by the participant as mechanisms for supporting this development, a series of follow-up questions were asked to explore the specific role of these mechanisms in the evolution of the relationship between the social network.

After the participant shared about each social connection, the researcher focused on the last two research questions: the role of social connections on student transition and resilience and

the role of the institution in social connection making. The participants were asked to share their perception of how each social connection influenced their transition, academic achievement, and sense of belonging to the university (if at all). Next, participants shared how they think the university facilitated or undermined their social connection making and what they recommended the institution can do to better support community college transfer students peer-to-peer social connection making. The interviews concluded by asking the participants to share any advice they had for incoming community college transfer students about best practices for connecting with their peers at the university.

Written Reflection. The individual interviews were followed by a digital written reflection which was emailed to each participant by the researcher (Appendix D). In the email to each participant, the researcher explained the purpose of this reflection activity was to let the participant share any thoughts about the process of peer-to-peer social connection making they may have forgotten to mention during the interview and to gather more information about the perceived role of their social connections on the participant's transition, achievement, and sense of belonging to the four-year university. There were five total questions in this reflection; the first two focused on reasons why students were attracted intellectually to other students in the classroom while the last three questions focused on the role of the connections in transition and resilience.

The first question asked participants to list the characteristics or personality traits that they perceived as belonging to a high-achieving student at the university. The second question asked for specific examples of actions or interactions with other students that suggested academic confidence and which would encourage the participant to want to befriend this individual. Question three asked participants to provide specific examples of how their peer

social network supported their academic achievement. Question four asked examples of how social connections with other UCLA students helped them learn how to navigate the university campus and its systems, including but not limited to: class registration, learning where things are on campus, and discovering student resources. The final question focused on understanding the role of social connections on their sense of belonging to the university, which was described as feelings of belonging to the university, feeling like they were a part of the university community, and/or feeling like others at the university treated them with respect. Participants were asked to spend two weeks completing this reflection and were encouraged to add more comments to this document as they continued to reflect on their answers over the two week period.

Data Analysis Methods

To analyze the qualitative data collected in this study, the researcher coded the data twice: once using a qualitative coding software and a second time by hand using multi-colored pens and highlighters. The researcher explored using several types of qualitative analysis software recommended by the faculty at the UCLA School of Education. One such software, “Quirkos,” was perceived as best suited for this project because it let the researcher easily and clearly highlight potential themes, including multiple themes that were attached to the same excerpt. Quirkos also had a feature that let the themes be dragged from each set of participant data to different one central location where they were represented by individual circles of different colors. Each circle represented a theme; the software allowed for as many sub-categories as necessary to be added to each theme circle and for the circles to be connected to one another in as many ways as the researcher desired. This allowed the researcher to identify findings and the relationships between these findings clearly. As more examples from each participant were pulled into thematic circles, the size of the circle also grew so that it was clear

which themes were most prevalent throughout the study and which findings were most significant.

While themes were not created in advance, the researcher did anticipate some themes that would emerge from the data having reviewed and annotated the transcripts and reflections prior to conducting the data analysis. In addition, some of the literature on social networks was anticipated during analysis to appear as possible themes. For example, homophily, or the idea that people with similar attributes will form ties, as well the sharing of resources for reciprocal success, were anticipated as factors in why social connections evolved and supported achievement (Kossinets & Watts, 2006; McPherson, Smith-Lovin, & Cook, 2001).

Ethical Issues

The focus of this study was to document the social connection making experiences of community college transfer students; potential ethical issues were few and limited to participants' sensitivity to recalling these past experiences. Some participants shared negative experiences and feelings about their transition process to the four-year university and/or the university itself, especially when recalling transfer student orientation; the confidential nature of this study was reinforced to address any concerns about anonymity before the interviews began. Also, before starting the interviews, the research expressed the positive intention of the study, the focus on positive influences of social connections on their university experience, and the goal of learning how to improve the transition process for future generations of community college students. Interviews were conducted in a quiet, private space on and off campus to alleviate possible concerns of anonymity based on the participant's preference. The researcher made sure to clarify before the interviews that they were not affiliated with nor had any relationships with staff in the university's undergraduate program.

Credibility & Trustworthiness

This study design included steps to reduce threats to credibility and to increase trustworthiness. Researcher bias during the probing question portion of each interview was the biggest threat to the study. To counter this bias, pilot interviews were critical to help finalize the interview protocol and prepare for appropriate follow-up questions that were objective and based on potential responses to open-ended questions. The written reflection also provided additional credible data since it was completed independently by the participants. The study's final interview protocol, written reflection data, and qualitative coding software procedures helped to ensure internal validity and credibility.

CHAPTER 4: FINDINGS

In this chapter, a set of findings based on the personal stories of twelve community college transfer students between the ages of 19-26 is reviewed. These students chose to attend community college as their first post-secondary institution and transferred at the start of their junior year to a large, public research university located in a major metropolitan city in the United States. While some lived within the same city as the university and others lived in suburban areas outside the city, all lived off-campus and commuted to and from school. The participants in this small sample represented multiple racial groups and noted that cost was the major factor in their decision to attend the community college; about half (five) were employed part-time while in school. According to literature on transfer students and studies of transfer shock, demographic variables such as age, race, gender, employment, and socio-economic status had minor impacts on transfer and graduation rates at the four-year university and were not analyzed in this study (Rhine et. al, 2000; Thurmond, 2007; Zhai and Newcomb, 2000; Schmidt and Wartick, 2013; Shapiro et. al, 2017b). STEM students were found to be more susceptible to transfer shock than non-STEM students in the literature (Cejda, 1997; Townley et. al, 2013; Lockwood, Hunt, Matlack, & Kelley, 2013) so the perceived experiences of STEM participants versus non-STEM participants were analyzed in this study.

With the limited time they spent on campus, and without the help of any prior connections, these twelve participants found ways to establish social connections with their peers at the four-year university within their first term and outside of extra-curricular activities. After data collection was completed, a thorough analysis was conducted with and without qualitative software to identify what among the participant stories was significant and answered the research questions.

Peer-to-Peer Social Connections are Established In or Around the Classroom

In their individual interviews, participants shared personal stories about how they established peer-to-peer social connections at the four-year university that formed outside of participation in extra-curricular activities. The data revealed a common theme: the participants shared one or more classes with their social connections. In this section, data from these individual interviews was triangulated to identify factors that facilitated initial and continued contact between peer-to-peer social connections formed in or around the classroom.

Proximity, Recognition, and Repeated Exposure Facilitates Initial Contact

When the participants were asked why they initiated first contact with their social connections, all twelve mentioned both proximity and/or familiarity due to sharing a class with their peer as the key factor in their decision to introduce themselves. Nine of the participants said they chose to approach or were approached by a classmate who was sitting next to them. Earl, a computer science and engineering major, said he met his first and closest friend at the university because they were sitting next to each other on the first day of class. Lisa, a global studies major, said that because “nobody knew anybody” on the first day of class, she just looked at the person sitting next to her and said, “Let’s make a group. And I just became friends with that person.”

At times, initial contact with a classmate was due to proximity outside of the classroom itself. Carol, a biochemistry major, noticed she and her classmates were all walking in the same direction after their first class session ended, asked if they were going to another class or not, “and that’s pretty much how we became friends.” Kevin, a cognitive science major, described how he connected with another cognitive science major he recognized from transfer student orientation while waiting outside their classroom building:

I walk to the class 10 minutes early because it's the first day and I see him sitting on the ground waiting for the class to start. I walked up and...I just sit next to him and was like... 'Is this your first class? How were your other classes? Is the professor cool? Is he tough?' And we talked until the doors opened, then we went and... got seats together in the class.

When students discovered they shared multiple classes, often due to sharing the same major, the likelihood of initial and continued contact increased due to repeated exposure in the classroom. Carol noticed she shared the same course schedule with another male student in her first term and decided to connect with him. "He was in the same major, we were taking all the same classes, so I was like, OK. I have one person that if I'm scared, I can go up to him."

Melissa, a sociology major, said she met her closest group of friends while sitting on a bench outside of their classroom building. She talked about how the discovery that they were in the same major encouraged her to get their contact information:

I was just like, 'Hey, are you guys sociology majors? Are you also stressing about which classes to take?' She said, 'Yeah.' I said, 'What have you enrolled in so far?' Then she told me and we happened to have class together. I was like, 'Wow, what a small world. Let's just keep in touch... We'll be like study buddies.'

Naomi, an English major, said she would not have reached out to one of her peers had she not been repeatedly exposed to him in multiple classes. "Honestly, he didn't [stand out] originally, but then he ended up being in several of my other classes... and when you see someone that you know, you go and sit next to them." Kevin said repeated exposure to a girl he shared multiple classes with was the reason why he thinks they became and stayed friends:

I think there's like some psychological phenomenon when you're exposed to someone more you tend to like them more. Just being around someone more, you talk more, you get to know them more. We're in a class together now that I actually decided to join because she was in it.

Five of twelve participants noted that when they discovered an in-class peer was also a transfer student, they were eager to introduce themselves. Aaron, an electrical engineering major,

said he learned that most of the students sitting around him in his first-term classes were also transfers, so they began to connect with one another. Naomi, an English major, talked about why she thinks her first social connection at the four-year university was a transfer student:

I think we both just wanted to have a friend there. She's a transfer too. So she wouldn't have had an opportunity, really, to make friends the same way that I wouldn't. I think that's basically it. We just wanted to be friends with each other.

All the participants agreed that they were most likely to initiate contact with peers from their classes who were closest in proximity in the classroom. Outside of the classroom, recognizing a classmate would facilitate initial contact. The more classes the participant shared with their peers, the more likely they were to initiate and continue contact due to repeated exposure.

Academic and Personal Relatability Facilitates Continued Contact

After initial contact was made between the participants and their social connections, they explained what experiences and discoveries encouraged continued contact. All twelve participants said they wished to continue contact with an in-class peer once they had established a sense of relatability, both academically and personally.

Academic Relatability. All the participants in this sample identified feelings of struggle when describing their academic experiences at the university. Lisa, along with the other participants who established connections with fellow transfer students, noted that early conversations with transfer student peers focused on transition struggles:

We were all sharing how we were all transfers. And we were all sharing how we're lost and we don't know what to do on campus and we're not included. That was everybody's feeling basically.

In another example, Lisa talked about her social network with non-transfer students and how commiserating about their shared class strengthened their bond over time:

In class it's easier to bond with people over a common thing. So, for example, we both think [our class] is hard and then we laugh about.... Every time we would meet for class, we would share our feelings about the class. What we thought about the class, about the TA, how it was really hard and everything. And then that would start a conversation...we just shared struggles. I don't think any of us had taken that class before, so it's pretty new and challenging material. And sometimes our classes are not organized very well. So I think just shared frustration, that helped us bond. Like, we had a common problem.

Nine of twelve participants described similar stories about how the topic of early conversations with their social connections focused on venting about the class itself. After struggling in one of their shared classes, Carol said she and her classmate “bonded over the pain of that class.” When they both did poorly on their mid-term, they exchanged numbers and began to text about the course on a regular basis. Daniel established regular contact with his classmate after they got into a habit of talking about their academic doubts in and outside of the classroom. He said their relationship never evolved past conversations about school, but that consistent contact strengthened his tie with this social connection:

I'm sharing any doubts that I have. She's also sharing doubts that I sometimes don't see, and we just kind of help each other out in that area. [We only talk about] academic doubts. We don't talk about emotions and stuff.

Academic relatability due to the perception that STEM coursework was more demanding than other academic majors was cited by all three male STEM students. Kevin vented to his fellow cognitive science major about their shared class when they were leaving the classroom:

After class I would walk up to her and I'd be like, 'Oh man, that lecture sucked' ...and then we'd walk out of the classroom and... then she'd typically go to the

office hours to get more help. Sometimes I joined her because I had nothing better to do.... and then if she needed more help I'd help her. It just kind of grew.

Half of the participants commented that when they shared a major and/or course schedule with their social connection, they also spent time together on campus outside of class sharing meals, studying, attending office hours, or accessing other campus resources together. All twelve participants said sharing academic frustrations facilitated continued contact with their social connections.

Personal Relatability. In addition to relating to each other academically, all twelve participants in this sample said finding points of personal relatability facilitated further continued contact which helped evolve the social connection to a broadening friendship. Earl described how moving from conversations about academic relatability to personal relatability encouraged strengthen his relationship with his peer:

At first, it was just shallow talks about our major stuff and why we chose to do it... where we were both from. But then later on, I guess we started connecting more. We started talking more about our hobbies and stuff, and then we found out that we both like playing rhythm games. That was a really big connection thing with us.

When a student in Kevin's class arrived with a skateboard, Kevin told the classmate he skateboarded too. The next day, Kevin brought his skateboard to class and the two of them began skateboarding regularly in their class breaks. Grace, a psychology major, talked about how discovering multiple points of personal relatability with her social connection led to further conversations:

When you meet someone that's so similar to you, you just get so, 'Oh my god, this person's living the same life as me. What?' So you just get excited, and then you want to find out more. Once you find out a little bit, I think that's what spewed on more of the questions. 'Wow, we have all of these things in common. What about all of these other things?'

Aaron said he made a conscious effort to discover if he had shared interests with the classmates because he could only become friends with those with whom he had “overlapping traits.” Carson, a psychology major, also brought up the importance of shared traits in his ability to connect with others:

If you're trying to form a friendship, I think it's easier to talk about something that you have shared interest in.... I think connection often comes from shared something, whether it's shared experience, shared interests, shared emotions towards something. That's what I think.

In addition to sharing interests, ten of twelve participants discussed the role of humor in establishing a friendship. Naomi explained the significance of humor in her relationship building:

Even things like laughing when someone tells a joke... it makes me personally feel more comfortable in talking because even if, I don't know, I'm not intelligent enough, or pretty enough or whatever thing that I'm not enough of, at least I made them laugh, so I'm interesting. ...For me, that's a big way of showing communication skills. If someone were to make a racist joke or something, I would not think that was funny and I would not want to be their friend, you know?

Earl made similar comments about the role of shared humor in his ability to connect with others:

I think you begin to feel more comfortable with the person once you guys share a same sense of humor because you know that something you say isn't going to offend them and you don't feel like you're tiptoeing when you're talking to them and you're like, "I don't know if I should say this because it might offend them." I could just be blatant or I could do this and that, and I know that person won't take it to heart or they won't be offended by it. I think that's a big thing for me to become closer with someone just because I feel like by being able to joke about things with them, it just shows that they're comfortable with me and I'm comfortable with them.

Earl, Daniel, Reggie, and Naomi all mentioned the role of memes in establishing deeper friendship with their connections. Webster's dictionary defined meme is, “an amusing or interesting item (such as a captioned picture or video) or genre of items that is

spread widely online especially through social media.” Reggie talked about how he sent memes that were relevant to class as a way to break the ice with his social connection:

There's an [institutional] memes page on Facebook and it's really easy to relate with that. Those are things you can share easily. Once she was very receptive of those memes, she started sharing other memes that aren't related to the school things. If someone gives a positive response to it all, I'll be more inclined to share some more. If someone just looked at it and then looked away, again, I guess it's just about the feeling you get from it.

Not all the social connections created by the participants evolved into friendship. When asked why some of these relationships did progress to that level, five female and two male participants in the sample said friendship was established through intimate conversations about personal problems. Carson said he and his classmate bonded because they were both dealing with a recent break up. Carol said she considered someone a friend when she discovered they were both “family oriented.” Melissa’s shared how social network talked about break-ups as well as family issues:

One of them is going through a rough breakup right now. We've helped her through that. And I complained to them about my brother and things like that. So I think we have a forged a bit of a deeper connection that will continue.

When community college transfer students were able to relate to one another on a personal level, they were motivated to continue contact with one another, even when there was only one point of personal relatability established. As participants continued to relate with their peers, a deeper connection was formed. Sharing a sense of humor and relating about personal problems were cited as the mechanisms which evolve a relationship from a social connection into broadening friendship.

The Role of Peer-to-Peer Social Connections in Transition and Resilience

Data from both the interviews and written reflections of these participants were analyzed to determine the role of social connections with classmates in the participant’s transition to the

university and their resilience (academic and emotional persistence over time leading to on-time graduation).

Social Connections with any Peer, Regardless of the Level of Contact, Alleviates Loneliness

In this sample, all twelve participants said that simply having a connection to another student on campus alleviated feelings of loneliness, whether it was a connection with a native or a transfer student. Lisa said in her interview that she was “happier to go on campus just because of the mere fact of knowing people on campus, even if [she] didn't see them.” In her written reflection she added, “My social connection with other students helped me not feel abandoned or alone in my studies.” In Kevin’s interview, he said “just having a friend” made him feel less isolated and although they did not talk much outside of the classroom, he took courses with a native student he met in his first class throughout subsequent terms.

Earl talked in his interview about the value of having social connections with peers in his computer science and engineering program, whether they were native or transfer students:

By having these connections, I won't necessarily end the entirety of my college education alone or just be going through these struggles that I have in classes or just personal life struggles by myself. I'll have people that could rely on, people that I trust to talk about things with.

Lisa’s interview responses indicated relationships with transfer students involved more personal contact than those with native students. She said they would tend to call each other often “because we're both transfers and we were feeling the same way.” Daniel also shared in his interview that connections with a transfer student helped him feel less lonely. He said, “just seeing that someone's in the same boat as I am, that makes me feel like I'm not the only one going through this journey of school.”

Tammy, who made the most social connections out of any participant in the sample, to both native and transfer students, talked at length during her interview about how her fears of

being alone on campus and the way social connections supported her transition to and resilience at the university:

I hate feeling lonely. It feels so lonely, and being lonely would lead to the depression, no motivation to do anything. I know I'd feel so unmotivated to do anything, because I'd be like, 'I'm alone,' and I'd just kind of self-destruct. I already know that. I know my patterns. I'd probably end up going into something like that. ... [social connections] are in a way, also a distraction from what's going on in school, just, 'I can talk to you, maybe not only about school, but something else.' We can get away from academics for a while, yeah..... [Without my social connection] my gaps would have been horrible. I wouldn't have anyone to be there with me. We'd do assignments together, our homework together. I wouldn't have that person, or I don't know if I would have found someone else. That's the thing, like if she wasn't there, would there have been someone else? I don't know.

Carol expressed similar thoughts in her interview when she said she “couldn’t imagine what it would be like if you didn't know anybody. You'd probably be sitting in the back of the class alone.” Melissa also commented in her interview about feeling isolated during her first week at the university. She said, “It's a really big adjustment... I think if I didn't have people that I consider friends or even like friendly acquaintances, I would feel really isolated and alone.”

All the participants discussed in interviews and written reflections that they used digital communication (text messaging or group chats on social media) to maintain continued contact with their social connections. In their in-person interviews, the participants said texting within their social network was often brief and focused on questions about class, but that simply having someone they could text at the university relieved feelings of isolation.

The stories of these participants revealed that the degree or depth of contact with native students was often less than with transfer student peers. Regardless of the type of student or level of contact, having a social connection with a peer alleviated loneliness because they knew they could contact another student if they so desired.

Social Connections with Classmates Reduces Feelings of Imposter Syndrome

While the term imposter syndrome was never used in the study, all but one participant mentioned experiencing feelings of imposter syndrome upon arrival at the four-year university during their interviews and in written reflections. When participants established academic relatability with their classmates through commiserating, it reduced the academic and personal insecurities they said fueled imposter syndrome. In Naomi's interview, she said she thinks all community college transfer students at the research site feel like imposters because of the rigor and reputation of the institution. She also shared how a connection with a native student was important to relieving this feeling:

I mean, I think everyone here gets imposter syndrome. And so of course I thought, 'I'm coming from a community college. I did not get here straight out of high school like most of these people did. They're 10 times smarter and better and whatever.' And so talking to [a native student], I realized that's not true. And even if it was, I'd still belong here. And so that helped encourage me to do well and help me know that I could.

All but one participant said they felt as if they were struggling with their first-term coursework more than their native student peers. When they discovered their native student peers were struggling as well, their feelings of imposter syndrome were reduced significantly. Lisa talked about this phenomenon in her written reflection:

I was persuaded that I was the only one getting low grades and that I couldn't keep up... but once I made friends [with native students], I was able to ask them how they were doing in their studies. It turned out that I was actually on the same level as almost everyone else, so it made me feel better.

Kevin explained in his interview how feelings of imposter syndrome were reduced when social connections were established with both native and transfer students in his program:

I feel like... when you're by yourself, or when you're alone and you get that feeling [of imposter syndrome], it's kind of like you start to believe it almost. But when you have friends, they're like, 'Nah, you're cool. We're all like this.'

Tammy was the youngest participant at 19 years old; having completed high school and community college at an accelerated pace, she felt that not having shared the on-campus experience of a typical native student made her feel “left out.” In her interview, she elaborated on the role of social connections with native students in relieving her academic and personal insecurities:

Imposter syndrome comes a lot from, I think, more academics or if I'm doing really bad at something, I'm just like, ‘I don't deserve to be here.’ I'll think about it, and I'm just like, ‘Wow, people that have been here for four years are probably smarter than me, because they came from high school.’ I'll do stuff like that in my head... I do feel out of place a lot, because I don't live on campus ... I never had the first-year experience, or I never had a lot of the experiences that people that have been here for four years had, and that's when I start to feel like I'm left out... Just knowing one person in your class, regardless of if you're really close with them or not, always helps ...just the fact that we're all going through it together, in a sense, helps. I'm not going through this alone.

Melissa explained during her interview how having social connections with native students helped alleviate her imposter syndrome.

It made my mood better, to see them, to talk with them. And I think in turn that made my academic work better because I wasn't spending as much energy on feeling lonely or helpless.... I did have a lot of stress nightmares about imposter syndrome and that kind of thing...I've had failures and accomplishments and I'm still here like feeling like an imposter. But realizing there are people who are just like me or maybe even have done less than me [I thought], ‘Why am I so afraid of messing up or not being good enough when this person, is so confident, but doesn't seem to have the ability to back it up?’ You know? So I think having that experience with my friends helped me.

While Melissa completed her interview at the end of her first-term, her written reflection was completed at the start of her second term. In her writing, she talked about how she was confident she would persevere to graduate on-time, but the lack of social connections with any type of student, native or transfer, in her second term classes increased her academic and personal insecurities:

This quarter I don't know many people in my classes, so I think I can see the difference in how academically successful and prepared I feel about it. I think the act of just talking and interacting with other people about classroom material helps me feel calmer and

clarify the content of what we're learning.... That also impacts how well I can focus and just stay on top of work, because when I'm depressed or lonely, I just don't feel good enough to do much of anything.

Daniel shared in his interview that although he had the support of a large family community who believed he could succeed in graduating from this prestigious university, he needed social connections to help him get over his own imposter syndrome. His friend from class who was also a transfer student helped him remain resilient:

Just seeing that someone's in the same boat as I am, that makes me feel like I'm not the only one going through this journey of school... it makes the pain easier because we've told each other, 'this is a good school. We're here for a reason.' So then, that sort of motivated both of us to do better in school.... Because before coming to school, even being here at school, sometimes I feel like maybe I don't belong here, but then I see that she's also trying. She's also pushing herself and so the motivation that I get from her makes me remember of how I got here and why I wanted to be here. That motivates me to keep on going.

Grace also said in her interview that transfer student social connections were important, because "just knowing that someone else is suffering, that you're not going through something alone, is very helpful." Although he did not talk about it in his interview, Carson wrote in his written reflection about how social connections to classmates were important to his ability to feel successful in his coursework:

It's hard to tell how well you are doing, or what you are doing wrong, without social comparison. Having social connections that I can trust has been key to helping me figure where I stand in my academic studies, and what I can do to improve (often by learning from what others do or do not do well). ...The more social connections you have with people you trust (or at least people whose academic ability you trust), the more [it is] helpful for navigating...an academic setting. It really does help to have social support.

For these participants, a social connection with a classmate relieved feelings of imposter syndrome rooted in academic and personal insecurity. Whether the social connection was to a native or transfer student, a connection with an in-class peer provided reassurance and increased participant confidence.

Social Connections with Native Students Significantly Increases Sense of Belonging and Navigational Capital

Nine of twelve participants in the sample said befriending a native student significantly increased their sense of belonging and navigational capital at the university. Carol, who described herself as someone who originally did not have an interest in higher education, wrote in length in her written reflection about how strongly social connections with native students influenced her sense of belonging to the university:

Social connections have allowed me to understand jokes about the campus and other things along these lines, which I think are a super important for having a sense of belonging. Additionally, my friends have invited me to eat at the dining halls and explore the [student housing area] which had one of the biggest impacts on my sense of belonging on campus. Once I understood what everyone joked about in terms of dorm/dining halls I felt like more of a member of the community and less of an outsider. How could you feel like you are a part of a community when you don't even understand the jokes made about it? These are experiences that a person visiting the campus for a day would not get to understand, and it made me feel more integrated with the campus.

Another key factor that influenced my sense of belonging is being able to help others with questions they have about the campus. Whenever I am approached by individuals visiting the campus and asking for directions, looking for offices, etc. and I know how to guide them I especially feel like I am a valid member of the [university's] community. I have the same feeling when I am able to answer a fellow student's questions as well (such as things about registration, navigating class websites, etc.) I never would have been able to gain the knowledge I have about the campus or programs in such a short amount of time if it weren't for the social connections.

In her interview, Lisa also said spending time in a peer's dorm made her feel she could relate to native students at the university:

Since we were going [to her dorm] every two weeks, I kind of felt like I had this experience of dorm life... Eating at the dorms. I could relate to other things now when people would say, 'Oh, I ate this at this place, or I live on this building. Oh yeah, I know where it is.' I could relate.

In his written, reflection, Carson talked about the role of social connections with native students on his sense of belonging to a prestigious four-year university:

Transferring to [this university] can be jarring, especially coming from a smaller community college. ...doing academically on par or better than my social connections has helped me feel like I belong, because it makes me feel like my acceptance to [this university] was justified.

In his in-person interview, Carson also discussed how social connections with native students provided him with unique navigational capital which increased his sense of belonging:

It's helpful to know someone who has been here all four years, because they usually have more of an understanding of how the campus works.... I knew which classes to avoid in my major, where different buildings were located around campus, and the norm of not grabbing a tray when eating at the dining halls. I also didn't feel alone, which was helpful for my own well-being.

Other participants talked about how native students provided them with navigational capital by assisting in course selection and registration. In his interview, Kevin said his native student friend in his major gave him many “useful tips...Because she came directly here, she didn't transfer. She is like, ‘Oh you know, if you take this route it's faster. Take this professor is good, don't take this one, he's kind of bad.’” In his interview, Aaron said he would have done “very poorly” without native students who helped him understand the complex course requirements of his electrical engineering program:

I wouldn't have been able to navigate, make decisions [in my major]... So for example, I had no idea we need a certain discipline and they're like, ‘Oh no, actually you should take that.’ I said ‘Why?’ And then he explained to me it's like, ‘Oh, actually that makes a lot of sense and it's something I would be interested in.’

Later, in his written reflection, Aaron added more about the role of native student friendships in sense of belonging to the university:

Being friends with ‘traditional’ students was a great way to get more familiar with UCLA culture and the things I “missed out on” by virtue of being a transfer. Things like overcoming the cringe of the 8-clap, learning about dorm culture and dining hall etiquette, shortcuts on campus helped me feel at ease navigating the campus

There were other forms of navigational capital that social connections with native students provided the participants. Several participants said native students showed them where

they could find student resources on campus they were not familiar with, such as free food and supplies. Tammy wrote in her written reflection about how social connections with older native students provided help with course registration and networking opportunities she would not have had on her own:

I get the inside scoop from my older peers on what the good classes are and who the good professors are... I get referred to powerful individuals within the various departments, such as college academic counseling who can help me get to the answers of my questions faster than having to go through 5 people before I can get to that certain person in charge. I needed to meet with a full-time counselor and could not manage to get an appointment until a close friend gave me her email and I referenced my friend in the email which led to an appointment a few days later discovering student resources... Additionally, I found out about free printing because I ran into my classmate who said she was going to print the same assignment I was looking to print so I followed her into [the printing center] and now I solely print my assignments in there.

Some participants said social connections with older transfer students were also important to providing information on transfer specific resources, but that native student connections were more influential in their sense of belonging. Melissa said in her interview that one of her friends from class introduced her to a transfer scholarship program she would not have known about otherwise. Lisa mentioned in her written reflection that she would have not known about the transfer specific resources on campus, including the transfer center events, without her social connection with an older transfer student. She also wrote in her reflection that in regard to course registration, “older peers are absolute life saviors who share good classes and professors.”

When the participants were able to create social connections with native students, their sense of belonging increased significantly. Participants felt they could relate to native students at the university after spending time in student dorms and dining areas with their social connections. Social connections with native students also increased the participant’s knowledge of university culture and provided unique navigational capital in the form of recommendations, resources, and networking opportunities.

Social Connections Support Motivation and Achievement in Shared Classes

The final way in which social connections with both native and transfer student classmates supported participant transition and resilience was by providing them with shared academic resources. In her interview, Naomi said, “the process of getting the good grades would have been a lot more painful” without friends to help her stay motivated and study for difficult exams. Grace said in her interview “being able to to explain things to other people that helped [her] remember it better.” All the participants spoke in their interviews about how texting their social connections from class to check on assignment deadlines and/or asking clarifying questions about homework increased feelings of motivation and confidence. Carol talked about how discussing assignments and sharing notes with her social network was important for their individual and shared success in her interview:

Doing homework together... helps so much because you have other brains to bounce off. You can get stuck on something so simple and then someone else will be like, ‘Wait, shouldn't it be like this?’ Then, it's like, all clear. I think also, if one of us couldn't attend office hours, usually one of the other people did and we would either record it or take notes and we would always share it. ...Like, me and one other person in the group made these study guides basically summarizing every lecture. We would always share those a week or two before the exam. Those were super helpful.

In his interview, Reggie described how having a friend with whom he shared multiple classes supported their mutual academic success at the university:

It would have been a lot more difficult without my friend, without her being in the same classes as me because we take maybe two of the same classes each quarter and we're very on top of things. ...I know I can count on this person. With her as a study partner, it's made sure that I get good grades here as opposed to, if she wasn't there I would probably forget deadlines, I wouldn't get as many answers right, I wouldn't be able to get the grades I have right now.

Melissa wrote in her reflection that her social networks in class “would often collaborate on assignments, discuss class, and study together.” In Tammy’s written reflection, she also said social networks with classmates provided access to study groups that “helped [her] understand

the course material.” She talked about the impact of a single social connection with a classmate in her major during her interview:

Not only did I just meet a new classmate and actually learn the material that I didn't pay attention to in class, I also met a new friend who I can continue to take my major classes with... We take classes together. We tend to sign up for the same classes together and we check up on each other like, ‘Hey, have you done this assignment?’ ‘No, I'm really struggling. I'm screwed. Help me.’ They're like, ‘All right. Open a shared Google Doc.’... I also get old assignments that help me get a better idea of what the expectations are of the class and professor. A previous study guide for my sociology class really helped me when preparing for the midterm.

Daniel, who said he did not become friends with his social connections outside of class, also shared in his interview about how these social networks supported his motivation and achievement at the university:

Having these people around is sort of the help that I need to get to where I want to be... We just help each other on assignments whenever we have the chance to. And if I have questions or if she has questions, we ask each other. If she says, ‘Hey, did you find the answer to question number five?’ And then I would say, ‘Yeah, I found it on page 10 or something.’ Or like, ‘Hey, if you don't show up to class, do you mind sending me the notes?’ Or ‘Hey, what did the professor talk about? What did you think about this assignment?’ ...So, even though I'm probably not going to be friends with them till the end of the year or till I graduate, having them for that quarter helped me for that class and I know for the next quarter, I'll make new friends or make different friends and I feel that those friendships that I make will help me for that time.

Aaron and the other STEM majors talked in their interviews about how their courses incorporated many group projects. In his written reflection, Aaron shared that “being part of study groups has made it easy to organize study sessions, collaborate on homework, go deeper into a topic and find partners for group projects.” In his interview, Kevin said studying with a social connection helped him better understand their challenging STEM coursework. “When we were studying together I was definitely basically tutoring him,” he said. “I feel like when you help teach someone, you learn more about the subject yourself.” Earl also talked in his interview

about how reviewing challenging course content with his peers supported his achievement in the computer science and engineering program:

[Social connections] were very crucial... I think there's one example I can remember very well, where we were studying for a midterm and one of them didn't really understand the problem at all. Which was uncharacteristic of him so he was like, 'Okay, and I don't understand it.' So I went to the whiteboard and I started drawing, I started explaining it and it wasn't a lot of effort because we already had this kind of connection, so he was able to see eventually where I was going with this. He did the same for me multiple times too as times went on. ...I think definitely me struggling in the classroom and him being really good at the subject we were learning [brought us closer together]. I relied on him a lot for help too. But then, he didn't see it as a burden. He was interested in what he was doing, so he wanted to teach it to me and he wanted to show me how to do it and stuff.

Both STEM and non-STEM participants said social connections were important to their mutual success in shared classes. The participants said having a peer from class they could contact with course questions improved motivation. Social connections with classmates also increased achievement by providing access to shared resources and study groups.

The Role of the Institution in Peer-to-Peer Social Connection Making

During their individual interviews, the participants were asked to think about institutional factors that helped or hindered their ability to connect with peers outside of extra-curricular activities. Four of the participants mentioned that they met students at transfer student orientation with whom they later connected in a shared class, but all twelve participants said transfer student orientation did not support peer-to-peer social connection making due to the lack of any social integration activities (such as ice breakers).

While all the participants agreed that the existence of the transfer student center on campus showed the institution was supportive of the transfer student population, only half of the participants visited the center in their free time. These six participants agreed the transfer center was a place to relax but it was not set up to support friendship making. Kevin said in his

interview, “If I went to transfer center it would mainly just be because I had a gap in my classes and I just wanted to do homework there.... I never tried to make friends there. I don't know why.”

The data revealed that the institutional factors which played the most significant role in facilitating peer-to-peer social connections outside of extra-curricular activities were related to the classroom: lab and/or discussion requirements, instructors, and curriculum. All data below is pulled from the individual interviews.

Programs with Lab and/or Discussion Requirements Facilitate Social Connections

Five of the participants in the sample belonged to programs where they were required to take lab and/or discussion sections alongside a pre-requisite for their major in their first term.

Reggie discussed how seeing a male and female peer in three of his courses encouraged them to connect with one another:

There were three sections in the class. There was lecture, lab and discussion. We sat next to each other always during discussion and lab. It was only in the lecture that she eventually migrated over.... She used to sit at the front and then she migrated back to where we were... because I talked to her more [over time] she was like, ‘I'd rather sit next to these people instead.’

In another one of his required lab classes, Reggie said the intensive nature of laboratory work encouraged students to ask each other help:

I was in stats class. I didn't know anyone in the class, and it had a lab section. In the lab, we go to a computer lab and we just work on coding. ...[he] started talking to me and asking me questions [about the assignment]. I wasn't sure, but I tried to help and we just both started working on it together and we ended up staying an hour after class trying to figure out how to get the coding done. I think that was a good icebreaker.

Carson, another STEM major, had a similar experience with a female peer from his lab course. He said that after working together side-by-side “over the course of a couple of lab meetings...is when [they] started chatting.” Carol, the only female STEM major, said the way her lab partners were assigned play a role in their ability to form a friendship:

They teach you about research the first quarter and then they pair you with a lab partner. They basically just give you a list of labs based on what you said you'd be interested in and they place you in one. We were assigned together... We spend a lot of hours together, like a lot, a lot of hours, so at some point you get tired and you stop talking about work. I think that's just how [friendship] happens.

Lisa and Melissa's non-STEM majors required they take discussion courses alongside lecture requisites. Lisa shared about how she became friends with a peer who was in both her lecture and discussion sections:

Every week we had to meet for discussion and every week we would share a bit more information about how we felt about the class, and then how we felt about other classes, and then how we felt about other people, about the major... I guess we kept sitting next to each other in lectures and in discussions, and we were joking about how [the class] made no sense for us.

In Melissa's case, she said the discussion activities themselves facilitated social connections among classmates:

We have a big lecture class and then a discussion section like once a week of maybe 20, 25 people. And I am terrified of public speaking... and participation is part of our grade. I think on that day we were discussing a concept, and some guy said something that I really did not agree with.... and afterwards I kind of jumped off another girl's point to refute this guy's argument. Afterwards we were walking out and she kind of came up beside me and was like, 'Hey, like I really liked what you said.' ... We talked to each other the next time our discussion section met. It was maybe after one or two weeks that we ended up exchanging phone numbers.

While none of the programs these participants belonged to had structured course sequences, having a course with laboratory and/or discussion pre-requisites increased the likelihood that the participant would share multiple classes with the same group of students and connect with their peers.

Instructors and Collaborative Work Influence Social Connection Making

In addition to sharing multiple classes with their peers, five participants said that instructors and curriculum played a role in their social connection development. Carol and Melissa both experienced instructors who provided simple student relatability activities on the

first day of class. Carol's instructor asked students to talk about their summer vacations which led her to discovering she and male peer had visited the same country; their connection began that day. Melissa said her instructor asked students to share their academic backgrounds which helped her establish connections and feel a sense of belonging to the university:

The professor asked all the transfers to raise their hand and it was like half the class. And I think that's encouraging to know that like you're not some like really teeny, tiny, minority just lost with not that much to relate to others about. That half of the other people in this huge lecture hall had been through like a similar experience and are probably willing to help you if you need it.

Lisa established social connections because of an activity in her class where they "had to present articles for the week" in small groups and give feedback to the presenter. In Naomi's creative writing class, the curriculum required that students "have to read everyone else's writings and then critique them." She said, "sharing the good and the bad I feel makes you more connected."

Aaron said that most of the instructors in the electrical engineering program "knew that we collaborate anyways" so most of the curriculum was based around small group projects. Carol also believed that in STEM instructors "encouraged people to work in groups" which "helped [make social connections] because even if you don't make a connection with everybody in the group, you'll probably make a connection with one person."

The institution played a role in peer-to-peer social connection making through program structure; repeated exposure in shared classes due to lab and/or discussion requisites facilitated social connections. Instructors and curriculum focused on collaborative work also increased the likelihood that students would connect with their classmates.

Summary of Findings

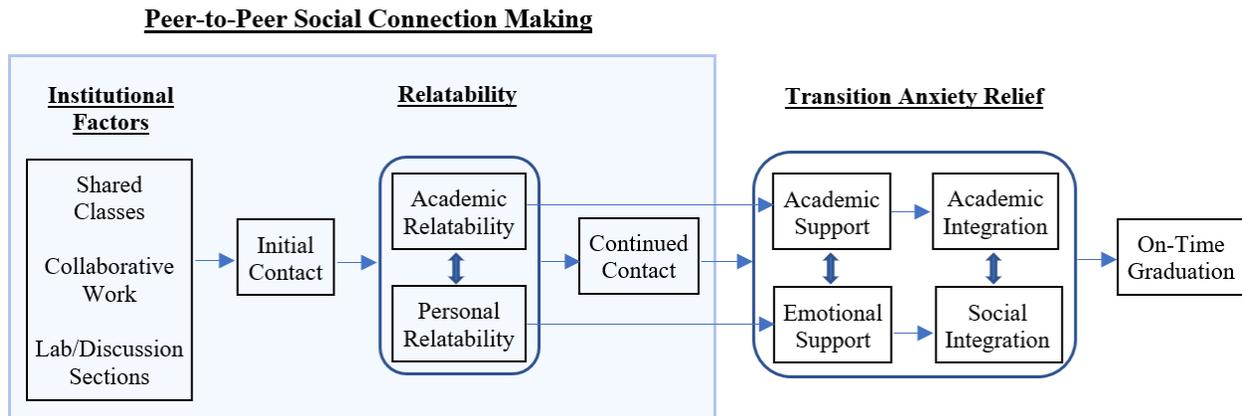
Through qualitative measures, this study uncovered the ways in which a sample of twelve community college transfer students made social connections with their in-class peers and the influence of these connections on student resilience. Much of what was uncovered in this study mirrored existing research: social connections support student transition, achievement, and resilience which facilitated on-time graduation. First, the participant stories revealed that peer-to-peer social connections made outside of university extra-curricular activities were established in or around the classroom. Initial contact occurred due to proximity and recognition, as well as familiarity due to repeated exposure over time.

Second, the participant narratives confirmed social connections played a positive role in transition and resilience (academic and emotional persistence over time). Social connections with native students and transfer students alleviated feelings of loneliness, regardless of the level of contact the individuals had with one another outside of class. These connections, especially those with native students, also reduced feelings of imposter syndrome rooted in academic insecurity. Social connections with native students provided participants with a strong sense of belonging to the university because they provided access to dorms and dining halls, as well as an understanding of campus culture. Native students also provided participants with unique navigational capital in the form of course recommendations, help navigating program requirements, accessing free student resources on campus, and networking opportunities with faculty and staff. Social connections with any student in a shared class was perceived to have improved academic motivation and achievement because students could ask each clarifying questions about class, share class resources, and study together.

Lastly, the participants discussed how the institution did and did not play a role in their social connection making at transfer student orientation and in the classroom. Transfer student orientation was perceived as an institutional deficit because it did not provide any social integration activities. The transfer student center was perceived as a positive space for transfer students, but it did not facilitate social connection making. The institution was perceived to have facilitated peer-to-peer social connection making when programs required students enroll in lab and/or discussion section prerequisites, repeated exposure and the interactive nature of the course supported friendship making. Participants also noted that instructors who began their class with relatability activities and who integrated collaborative work into the curriculum facilitated peer-to-peer social connection making.

To better understand the findings in this study, the researcher created a model of community college transfer student integration which portrayed the relationship between social connections and on-time graduation, institutional factors, and the dynamic connections between these influences (Figure 2).

Figure 2. Model of Community College Transfer Student Integration



As community college transfer students interacted with other students in their classes, finding points of academic and personal relatability encouraged continued contact. As contact between peer-to-peer social connections with classmates continued over time, these relationships provided students with academic and emotional support. These support systems provided feelings of academic and social integration into the four-year university which relieved their transition anxiety. Through this process of social and academic integration, community college transfer student resilience (academic and emotional persistence over time) increased which resulted in on-time graduation

CHAPTER 5: CONCLUSION

This study aims to gain a deeper understanding of how traditional community college transfer students at a four-year university develop social connections with their peers outside of extra-curricular activity participation and how these social connections influence transition to the four-year university. Studies on transfer students indicates that both academic and social adjustment are necessary for the student to successfully transition within and to the four-year university (Tinto, 1975, 2017; Astin, 1984; Laanan, 2004; Laanan, 2007; Laanan, 2010; Young & Litzler, 2013). Interventions across the literature to address this area focus largely on participation in university extra-curricular activities, such as student mentorship programs, social events, or campus clubs. These interventions do not address the needs of community college transfer students who are often commuters, employed while in school, and/or have personal life obligations that prevent them from spending leisure time on campus (Berger & Melaney, 2001; Laanan, 2007; Townsend & Wilson, 2009; De Wine et. al, 2017). Studies on how transfer students develop social connections with their university peers on their own are extremely limited. This study finds that the such social connections develop in or around the classroom, between the community college transfer student and their peers with whom they share classes.

This study is significant and adds to the current body of knowledge on community college transfer students by identifying the ways university students in a digital society communicate with one another and the benefits of social connections to transfer and native students. University students rely on text messaging and group chats to feel socially connected and simply having access to other students digitally alleviates loneliness, even if that access is rarely utilized. For community college transfer students, connections with native students are critical to developing a sense of belonging to the university. Connections to transfer students,

especially older transfer students, are also important for providing community college transfer students with feelings of academic relatability. A key discovery in this study is that social connections with in-class peers, regardless of the depth of the relationship or the nature of the student (native or transfer), are essential to ensuring the best possible chance that the community college transfer student will succeed in their coursework.

Discussion

My intention with this study is to understand the process and role of peer-to-peer social connection making for community college transfer students at the four-year university. I did not find such a study in my review of existing literature and was not sure what to expect from these participants. My participants all have very different personalities and come from different backgrounds and different majors; I am pleasantly surprised that a pattern of common themes quickly emerged from interview to interview without any changes or leading from my interview questions.

In this study, I uncover that community college transfer students who develop friendships outside of extra-curricular activities do so primarily with peers they meet from shared classes. The study participants say these social connections act as both sources of academic and emotional support which together reduce feelings of loneliness, increase their sense of belonging, motivation, and achievement. Social networks with classmates provide access to academic resources that the individual does not have access to on their own. This study also suggests that instructors can facilitate these social connections between their students through small actions. The way these social connections form and the details regarding the manner in which they support students are significant discoveries that warrant further attention from institutions of higher education.

The Development of Peer-to-Peer Social Connections

All the participants in this study agree that peer-to-peer social connections evolve when students are repeatedly exposed to one another (in the classroom) and establish a sense of academic and/or personal relatability. Social network research says when individuals interact repeatedly and in similar ways, they are more likely to form social connections (Snijders et al., 2007), consistent with the findings in this study. Further research describes a phenomenon known as *homophily*, which says people with similar attributes or characteristics form ties at higher rates than people with dissimilar attributes, (Kossinets & Watts, 2006; McPherson et al., 2001). Sometimes, these points of relatability with students are shared personal experiences, such as both participants being transfer students, but most of the participants in this study say a common interest or hobby is the mechanism that leads to feelings of friendship.

Mutual venting about struggles with coursework also establishes academic and emotional relatability which also leads to bonding. Studies on the transition anxieties of community college transfer students indicates that regardless of their success in community college courses, they feel insecure about their ability to perform well at four-year university and believe a negative stigma about the abilities of community college transfer students exists (Jackson & Laanan, 2015; Chin-Newman & Shaw, 2013; Shaw & Chin-Newman, 2017; De Wine et al., 2017; Xu et al., 2017; Miller, 2013). Humor is often a way the participants commiserate about their classes, sending each other memes or funny jokes about college student struggles. It is also how the participants say they gauge whether they can become closer friends with a classmate. Social network literature suggests these tendencies occur because people naturally wanted to reduce uncertainty: “As a relationship between two actors develops, the level of uncertainty as to

how the other will react in different situations will decline and the strength of the relationship will increase” (Daly & Finnigan, 2011).

The social connections of these participants evolve into a closer friendship when the individuals share more intimate experiences, including talking about romantic and family relationship issues. Literature on friendship making notes that friendship is an emotional bond between two individuals that provides mutual enjoyment (Howes, 1983; Bukowski & Hosa, 1989). The positive or negative impact of friendship on a person’s life depends on the affiliations, intimacy, and social support the friendship provides (Ferrans & Powers, 1985; Sigstad et. al, 2005). The participant stories reveal that a social connection provides important social support regardless of whether it evolves into friendship. Social connections with classmates provide great value to the community college transfer student both emotionally and academically which helps them remain resilient and graduate on-time.

Social Connections and Resilience

The personal stories of the community college transfer students in this study reveal new insight into how social connections provide sense of belonging and support achievement at the four-year university. My goal with this study is to: 1) highlight the need for faculty and administrators in higher education to recognize the importance of sense of belonging in community college transfer student achievement and why they need peer-to-peer social connections with native students to provide this feeling; and 2) highlight the academic advantage that students with social connections to in-class peers have versus those who do not. The stories of the students in this study confirm earlier research that transfer student sense of belonging increases retention and GPA, lowers stress, improved mental and physical health, and life satisfaction (Astin, 1984; Tinto, 2017; Shaw & Chin-Newman, 2017). An important take-away

from this study is that social connections with transfer students are important in relieving general transition anxiety, social connections with any student alleviates feelings of isolation and loneliness, and social connections with native students help relieve feelings of imposter syndrome rooted in academic insecurity.

Transition Anxiety. Social connections provide a safe space for students to vent their feelings to one another, commiserate, and just talk about the experience of being a university student. According to the Handbook of Educational Psychology (Alexander & Winne, 2006) students experience distress when transitioning between different school environments which can be exacerbated by the sense of connectedness and support from the new institution, or lack thereof; school based bonds function as support systems which relieve transition anxiety and increase student achievement. The existing literature on transfer students indicates that transition anxiety and feelings of feelings of loneliness in the university environment are major barriers to adjustment for community college transfer students (De Wine et. al, 2017; Kearney et. al, 2018). The participants who connect with transfer students in their first-term talk about how their bonds form because of this shared identity. They also note that there is unique value to such social connections; they talk with their transfer student peers more frequently at the start of the relationship than with native student peers, often calling or texting one another to vent about the struggles of being a transfer student. Transfer students need connections with other transfer students to ease their transition anxiety.

Imposter Syndrome. Relating about academic struggles with native students in their class alleviates the academic insecurity participants say fuels imposter syndrome for community college transfer students. It is significant that community college transfer students in this study use the term “imposter syndrome” when describing their feelings during the first term at the

university because this term is never included in the study materials (interview questions and written reflection prompts). The use of it by the participants implies that there is a significant psychological barrier for community college transfer students to overcome upon arrival at the four-year university. Research on community college transfer students finds they believe the community college is perceived as less rigorous than the four-year university, and that they are not secure in their ability to perform academically after transfer (Jackson & Laanan, 2015; Chin-Newman & Shaw, 2013; Shaw & Chin-Newman, 2017; Xu et. al, 2017).

Laanan's extensive research on transfer students, transfer shock, and transition needs confirms that social integration is the key to community college transfer students quickly developing a sense of belonging which reduces the risk of transfer shock (2001; 2004; 2007; 2010). The only participant in this study who does not refer to feelings of imposter syndrome was an international student who did later write in his reflection that he needed the help of study groups in class to achieve. I do not account for demographic variables in this study but I do find it interesting that regardless of race, gender, employment status, and even exposure to the university before transfer, these participants do not feel confident in their academic abilities until they develop social connections with classmates. A key finding of this study is that a social connection to a native student is especially helpful in reducing imposter syndrome; this is because when a native student reveals they also are struggling with the course, the participant no longer attributes their fears about achievement to their community college transfer student identity.

Loneliness and Isolation. Social connections of any type alleviate feelings of loneliness and isolation in these participants. This study finds that the level of contact outside of class with a social connection does not impact the level of comfort the participants feel at the university.

Simply knowing that they know someone else on campus is all it takes to stop feeling isolated. Feelings of loneliness and isolation are a major threat to community college transfer students (Jackson & Laanan, 2015; Chin-Newman & Shaw, 2013; Shaw & Chin-Newman, 2017; Xu et. al, 2017; Miller, 2013). Community college transfer students lose the support of friends, family, and the community which existed within the community college itself when they transfer institutions (Mattanah et al., 2012). This loss creates feelings of loneliness among community college transfer students and feelings that they will not belong to the university even before arrival (Kearney et. al, 2018). The discovery that social connections to any student alleviate this major transition barrier is noteworthy because it shows that there is value to superficial connections which should not be downplayed, and reminds me of Spady's (1970) research on suicidal tendencies stemming from feeling of isolation. Some of the participants explicitly mention issues of depression and mental health regarding their transition experiences and that social connections are the only tool they feel which helps them handle these mental health issues.

Social Connections and Achievement

This study finds that social connections between community college transfer students and their peers with whom they share classes results in the students sharing resources and knowledge with one another to support mutual achievement in a course. This mirrors existing research on social capital theory and social networks in organizational settings: positive social relationships evolve from the sharing of resources in the form of knowledge and skills to achieve a desired purpose (Bourdieu, 1986; Coleman, 1988; Dika & Singh, 2002; Lin, 2001, Daly & Finnigan, 2011). The nature and flow of resources within a network, especially those that encourage collective success, facilitates development of the social network (Snijders et. al, 2007; Lareau et. al, 2018). Community college transfer students who form social connections or networks with

their in-class peers have access to resources such as class notes and study materials they would not otherwise have. This is an important finding because it implies that a community college transfer student who does not establish social connections with their in-class peers at the four-year university is receiving fewer resources and at an unfair disadvantage.

Implications and Recommendations for Practice

This study confirms that community college transfer students hold feelings of imposter syndrome and feel insecure about their ability to do well in their university courses upon transfer, regardless of prior academic performance. This study shows the high value of social connections with both native and transfer student classmates in transition and resilience. This study reveals that the classroom is the most important setting at the university for influencing community college transfer student social integration. It is not fair to expect students who have no social connections with their in-class peers to perform as well as students who have access to social networks formed with classmates. The having or not having of peer-to-peer social connections with one's classmates at the university results in inequitable outcomes for students; such a finding implies that institutions must address the role of faculty in facilitating such bonds.

As the literature review shows, four-year universities continue to invest time and money into extra-curricular activities to support student sense of belonging. Research on community college transfer students finds they have little personal time to spend on campus establishing social connections outside of the classroom due to the increased demands of upper-level coursework (Berger & Melaney, 2001; De Wine et. al, 2017). This study implies that there are much simpler, more cost-effective ways to address student emotional needs that simultaneously improve student outcomes.

The Role of the Instructor: Creating Community in the Classroom

Depending on where an instructor receives their education and teacher training experiences, their approach to pedagogy and curriculum design will vary. This study suggests that effective teachers in higher education must reevaluate their role in the classroom as not just a provider of content knowledge, but as a facilitator of peer-to-peer social connection making, or risk inadvertently creating inequitable outcomes for community college transfer students. Professional development efforts for teachers in K-12 over the last two decades have focused more heavily on student social-emotional needs and curriculum that addresses such needs. In higher education, faculty are not required to have completed teacher training programs and professional development often focuses more on content areas rather than educational research. This study and other studies on the professionalization of higher education imply that some form of training for higher education faculty must exist. Effective instructors at all levels should understand the influence that the teacher has on creating supportive and social classroom environments and the ways in which their curriculum facilitates or undermines students from connecting with one another.

Explicitly Addressing Imposter Syndrome. According to Cjeda (1994), community college students feel a sense of intimidation from university faculty and believe they view community college students as academically suspect, which makes the student more hesitant to connect with their instructor. At research institutions, this perception is even greater (Berger & Melaney, 2001). This study highlights how imposter syndrome is a major threat for community college transfer students, a growing population in the United States. It is my recommendation that faculty in higher education explicitly address feelings of imposter syndrome in their classes and encourage the use of office hours for transfer students. If community college transfer

students are made to feel their abilities are equally comparable to those of their non-transfer peers, they have a more positive academic adjustment (Jackson & Laanan, 2015; Berger & Melaney, 2003). Instructors should not only take the time to foster social connections between students, but to also make explicitly clear that all students in the class are equally capable of passing the course.

The Role of the Institution: Taking Steps to Address Social Integration in the 21st century

Facilitating Relatability and Connections between Transfer and Native Students.

Since we know that relatability is the main factor that drives social connection evolution, my recommendation is that institutions listen to the findings in this study and previous studies on transfer student needs which clearly highlights the lack of attention given to social integration. Instructors should be directed to make time during the first few minutes of class to identify points of relatability between their students. These ice breaker activities can help students find others who share their personal interests and hobbies, which helps facilitate the development of meaningful friendships. In addition, instructors can identify the transfer and non-transfer students in their classes to help facilitate important connections to both native and transfer students that the community college transfer student population needs to successfully transition to the four-year university.

While transfer student orientation was not a focus of this study, prior research on transfer student orientations align with the comments of participants in this study: they do not focus on social integration needs. This implies that institutions need to make a greater effort to respond to the feedback students share about orientations and make begin to incorporate relatability activities that community college transfer students so desperately need. This study shows that students respond to such activities and they develop meaningful social connections as a result.

Supporting Collaborative Learning Opportunities (In-Person and Online). This study finds that participation in collaborative learning opportunities (such as laboratory classes, discussion groups, and small group projects) increases the likelihood that students develop meaningful peer-to-peer social connections with one another. While some content areas are more inclined to lend themselves to group projects as a means of assessment, the decision to incorporate collaborative learning opportunities into the curriculum is often the choice of the instructor. There is an extensive amount of existing research and professional development resources available to educators regarding the benefits of collaborative learning for students of all ages. My recommendation for four-year universities is to review the importance of such practices with instructors using research based professional development and set standards for collaborative work in all content areas. I also recommend that academic departments review their course sequences and pre-requisites to see if there is a way to create more sequential course completion, so students are likely to take multiple courses together each term.

As more students choose to attend online courses, being able to provide collaborative learning opportunities digitally is also important. This study implies that students today rely on digital communication to feel connected with one another. Currently, the world is facing a global pandemic (COVID-19) and coursework is completely online for the foreseeable future. I worry that attention to sense of belonging and social connections between students will be lost in this time and community college transfer students at four-year universities will struggle with motivation and achievement. My recommendation is that institutions share digital tools with students to help them connect with one another, such as social media groups, group chat applications, and messaging boards. I also recommend that institutions discuss this issue with instructors and create plans to incorporate opportunities for students to get to know one another

digitally and work collaboratively in classes before the fall term of 2020 begins. Professional development efforts for higher education must address this shift in our current education system in order to avoid even further risk that students, regardless of whether or not they are transfer students, will not persist to on-time graduation.

Limitations

A major limitation of this study is its small sample size and the characteristics of the participants themselves. These twelve students do not represent all community college students and the findings are not generalizable to a mass population. The participants all hold high incoming GPA's of 3.0 or higher from the community college; it is possible this played a role in their resilience. For this study to be more generalizable, I will have to apply the design on a much larger scale, at multiple sites, and with various types of transfer students, and accounting for demographic variables and diverse GPA ranges. In addition to a larger study, a longitudinal study that follows students from their first-term at the four-year university to their final term is also ideal for increasing validity. The COVID-19 pandemic is another (unexpected) limitation I face in this study. I am missing four of the participant's written reflections because they did not respond to my requests within the time frame of this study, which ends as the pandemic began.

I want to help four-year institutions understand the importance of supporting the social integration needs of community college transfer students, specifically commuters, regardless of demographic factors or background. Technology is changing the culture of current and future generations, and institutions have an obligation to learn how to adapt to a digital culture that best serves their students' academic and emotional needs. Although there are only twelve participants, the fact that so many of the findings emerge from all twelve participant stories is significant and validates the credibility of the data acquired.

Suggestions for Future Research

Educational psychology research on social belonging and school social context on student behavior focuses largely on K-12 urban schools. I believe the lack of attention to the impact of university social context on adult student behavior represents a problematic culture in education: that the older a student is the less they need help with sense of belonging.

Educational psychology research finds that social isolation increases educational risks but students across the literature say there is not a culture of addressing social integration at four-year universities. I suggest that more research must be conducted on the psychological and developmental needs of students as they move to university environments for this cultural shift to occur, with an emphasis on growing populations like community college transfer students.

My personal teaching philosophy is rooted in educational psychology theories which emphasize the importance of establishing student sense of belonging *before* introducing academic content. Taking time at the start of a program to establish sense of belonging results in better relationships between students and between the student and teacher, which results in fewer classroom management issues, more motivated learners, and better learning outcomes for all (Alexander & Winne, 2006). Educational psychology guides my teaching because it was a major component of my teacher preparation program in graduate school, but this is not the case at every university. I suggest that more research in this area occurs so that educational psychology content becomes a standard requirement in all teacher preparation programs and professional development programs for faculty in higher education.

APPENDIX A – RECRUITMENT FLYER

**Are you a
Community College Transfer Student?**



**Have you made friends at the university
since you transferred?**

If so, I want to hear from you!

I am looking for 20 people to interview about making social connections at the university!

Your interview responses will be 100% confidential.

I want to find out how community college transfer students make friends, study buddies, carpool groups, etc. outside of extracurricular activities.

Participants will receive a \$25 Amazon gift card at the end of their interview!

→ If you are interested in participating in this study, please complete an initial survey by visiting → tinyurl.com/cctsu

Potential participants are asked to complete this survey in order to assess whether they are eligible to participate. Please note that potential participants will not receive any payment for completing the initial survey. Those who are selected to participate in the study will be contacted via email in November.

Questions? Email anousbeh.sh@gmail.com ©. Your participation will help universities better understand the transition needs of community college transfer students. This study is being conducted by Anousbeh Shayestehpour, a UCLA Graduate Student in the Educational Leadership Program (Ed.D.). The purpose of this study is to understand how community college transfer students make friends or connections with their peers, how these connections influenced their success at the university, and what the university can do better to help support student social integration.

APPENDIX B – INTAKE FORM

Intake Form - Community College Transfer Student Study

Potential study participants: please complete the entirety of this form if you are interested in participating in this study of how community college transfer students at a four-year university develop social connections (friendships) with other university students after transferring. Please note that potential participants are asked to complete this survey in order to assess whether they are eligible to participate and will not receive any payment for completing the survey.

1. Email address : _____
2. Name (First Last): _____
3. Phone Number : _____
4. Age : _____
5. Gender : _____
6. What is the name of the community college you attended? :

7. When did you begin your studies at this community college?
(Term, Year) : _____
8. What was your final community college GPA?: _____
9. When did you transfer to the university? (Term, Year) : _____
10. What was your academic standing when you transferred to the university?:
 - Freshman
 - Sophomore
 - Junior
 - Senior
11. What was your major when you first transferred to the university? *:

12. What is your current major?: _____
13. What is your current GPA? : _____
14. What is your student status while enrolled at the university?
 - Part-Time
 - Full-Time

15. What is your current standing?
- Freshman
 - Sophomore
 - Junior
 - Senior
16. What is your anticipated graduation date from the university?
(Term, Year): _____
17. Please select the option that best reflects your employment status
- I am not working while in school
 - I work less than 10 hours a week, on-campus
 - I work less than 10 hours a week, off-campus
 - I work 10-20 hours a week, on-campus
 - I work 10-20 hours a week, off-campus
 - I work 20-30 hours a week, on-campus
 - I work 20-30 hours a week, off-campus
 - I work 30-40 hours a week, on-campus
 - I work 30-40 hours a week, off-campus
 - I work 40 or more hours a week, on-campus
 - I work 40 or more hours a week, off-campus
18. Have you ever lived in the university's student housing? (Yes or No)
- Yes – describe where: _____
 - No
19. Have you ever been a part of a university club or organization? If so, please list the name(s) of these club(s) and how long you have been a part of them.

Social Connection Information

To qualify for this study, you must identify as having made social connections (friendships) with other students while enrolled at the university. Answer the set of questions below for each of your social connections (up to 5).

1. Is this a connection to one person or a group of people?
 - One Person
 - Group of People
2. If you selected "Group," how many people are in the group?
3. When did you meet this person/group? (Month, Year)
4. Where did you meet? Please be specific.
5. How long after you met did you feel that you had established a social connection (friendship) with this person/group?
 - Less than a week
 - 1-2 weeks
 - 3-4 weeks
 - 4-6 weeks (halfway through the academic quarter)
 - 6-8 weeks
 - 8-10 weeks
 - 10-12 weeks (by the end of the academic quarter)
 - Longer than 3 months or 1 academic quarter
6. In your own words, briefly describe how you developed this connection:

7. In your own words, please describe the role of this social connection in your life:

APPENDIX C – INTERVIEW PROTOCOL

Hello. My name is Anousheh and I am the principal investigator for the study, “*Addressing Transfer Shock: How Community College Transfer Students Develop Peer-to-Peer Social Connections at a Four-Year University.*” Thank you for sharing your experiences with me today. I am excited to learn about your transition to the four-year university and the social connections you made upon becoming a university student. As noted in the consent form you reviewed and agreed to, all your responses and identifying information will remain confidential.

- Please state your name and age for recording purposes.
- You have been provided with a written consent form. Please confirm that you have read, understood the consent form, and agreed to participate in the study with a verbal Yes or No.

The purpose of this study is to understand how community college transfer students develop social connections with their peers at a four-year university. I hope to use what is discovered in this study to help future community college transfer students develop social connections quickly and easily. I was also a community college transfer student myself, so I am interested in learning about the stories of other community college transfer students. While I will not share my own story, feel free to ask me any questions throughout the interview if you need clarification, and let me know if you do not feel comfortable answering any questions.

Before we begin talking about your time at the university, I’d like to learn more about your college journey and the steps leading up to your transfer to this four-year university.

1. Why did you choose community college as your first post-secondary institution?
 - a. What factors influenced your decision to attend community college?
 - i. Were any of these factors more important than others? Why?
2. Did you know you wanted to transfer to this university when you started community college?
 - a. If yes, why did you choose this university as your transfer institution?
 - b. If no, how did you come to the decision to transfer to this university?
3. Explain your proximity to and exposure to your institutions:
 - a. Where did you live while attending community college?
 - i. How far was it from the institution?
 - b. Where do you live while attending the university?
 - i. How far is it from the institution?
 - c. Did you have any prior social connections to the university?
4. How did you decide upon your university major?

Next, I'm going to ask you about the univeristy's mandatory Transfer Student Orientation. Please try your best to recall that day, how it went, and what you felt like.

1. What did you expect Transfer Student Orientation to be like?
2. What was the reality of your experience?
3. Did you make any social connections at the orientation?
 - a. If yes, why?
 - b. If no, why not?

Now I will ask you specific questions about each social connection you mentioned in your survey responses in chronological order from the time you transferred.

You noted that you met a **(group/person)** during the **(academic term/date)**.

1. Please tell me a little bit about your first interaction with this person.
 - a. Who is this person you met?
 - b. Where and when were you when you met them?
 - c. What did you and this person do or say to each other the first time you met?
 - d. What drew you to this person (why did you start talking)?
 - e. Why did you and this person continue to talk?
2. According to your survey, you said it took **(length)** for you to feel like you had established a connection or friendship with this **person/group**. Can you please explain why it took this long?
 - a. What happened during this time?
 - b. What made you feel like the connection was a meaningful one?
3. What experiences led you to develop a closer relationship with this person?
 - a. Inside the classroom
 - b. Outside the classroom
4. What types of communication with this person helped you to develop a closeness?
 - a. In-Person
 - i. What specific things that you said made you feel closer to this person?
 - ii. What specific actions that occurred made you feel closer to this person?
 - iii. What non-verbal cues made you want to become closer to this person?
 - b. Digitally
 - i. What forms of digital communication did you and this person use?
 - ii. How did this digital communication impact the development of your relationship?
 - iii. What specific things that were done digitally made you feel closer to this person?

5. What support, resources, or help do you and this person share with one another?
 - a. How would you describe the purpose of this relationship in your life?
 - b. In what settings do you and this person interact? Please describe.
6. How has this social connection influenced your transition to the university?
7. How did this social connection impact your academic success, if at all?
8. How has this social connection influenced your sense of belonging to the university?

Final questions:

1. What obstacles prevented you from forming more social connections at the university?
2. Were there any institutional barriers that prevented you from connecting with more students during your first-term at the university?
3. Were there things the university did to help facilitate these social connections between you and other students? If so, please explain.
4. What do you think the university can do to better help community college transfer students make social connections with their peers quickly?
5. Speaking for yourself, what situations or actions are most helpful to making new connections with people?
6. What advice would you give to future community college transfer students to help them make friends at the four-year university?

APPENDIX D – WRITTEN REFLECTION

Directions

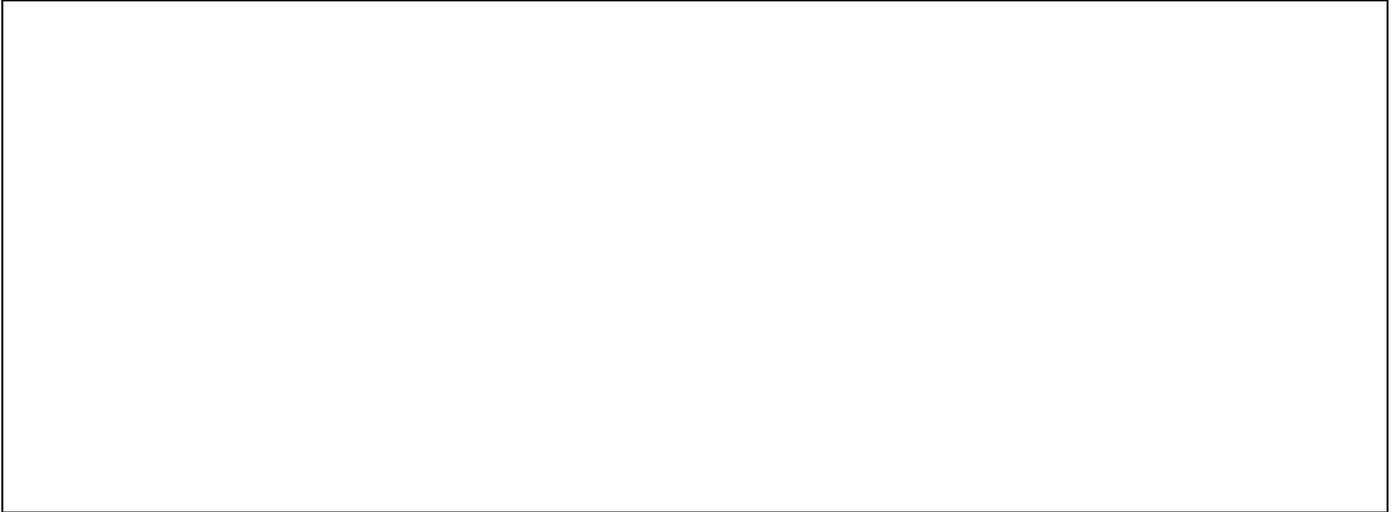
Thank you for participating in this study. Please complete this reflection by providing written answers to the questions on the next pages of this digital form. This reflection assignment is to focus on how the social connections you made at the four-year university have impacted your **resilience (academic and emotional persistence over time leading to on-time graduation)**.

Over the next days you may continue to discover new thoughts or comments you wish to add to your responses. Please take the next two weeks to reflect on these prompts before turning in the assignment. The more you can reflect and write, the better. For this activity, the focus is not on analyzing specific relationships one by one. Instead, think about the impact all peer-to-peer social connections with your classmates when responding.

Questions 1 and 2 are brief; please provide more detailed reflections on questions 3, 4, and 5.

Please return your completed reflections to anousheh.sh@gmail.com.

1. What are the **personal characteristics** you feel **help people do well at your university**?
Please explain how these personal traits directly impact your academic resilience.



2. Based on your **first interaction**, what could a fellow student **say or do** to make you think they are someone who does well academically?



3. How have your **social connections** with other university students **helped your academic studies**? Please describe specific situations or examples.

4. How have your **social connections** with other university students **helped you learn how to navigate campus & systems?** Including but not limited to: class registration, learning where things are on campus, and discovering student resources.
Please think of specific impacts or examples to share.

5. How have your **social connections** with other university students **influenced your sense of belonging**? Sense of belonging has a wide definition, but includes things like:
- Feeling like you belong at the university
 - Feeling like you are a part of the university community
 - Feeling like others at the university treat you with respect

REFERENCES

- Alexander P. A., Winne, P.H. (2006). Handbook of educational psychology. *Routledge handbooks*. Retrieved from <https://www.routledgehandbooks.com/doi/10.4324/9780203874790.ch28>
- Astin, A. W. (1984). Student involvement: a developmental theory for higher education. *Journal of College Student Development*, 40(5), 518–29. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ614278&site=ehost-live>
- Astin, A. W. (1993). *What matters in college? Four critical years revisited*. *Jossey-Bass higher and adult education series*. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED351927&site=ehost-live>
- Berger, J. B., & Malaney, G. D. (2001). *Assessing the Transition of Transfer Students from Community Colleges to a University*. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED453489&site=ehost-live>
- Blaylock, R. S., & Bresciani, M. J. (2011). Exploring the Success of Transfer Programs for Community College Students. *Research & Practice in Assessment*, 6, 43–61. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1062742&site=ehost-live>
- Blimling, G. S., & Whitt, E. J. (1999). *Good Practice in Student Affairs: Principles To Foster Student Learning*. San Francisco, CA: Jossey-Bass, Inc.

- Bourdieu, P. (1986). The forms of social capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241–258). New York, NY: Greenwood.
- Bramston, P., Chipuer, H., & Pretty, G. (2005). Conceptual principles of quality of life: An empirical exploration. *Journal of Intellectual Disability Research*, *49*, 728–733.
doi:10.1111/j.1365-2788.2005.00741.x
- Brazzell, J. C., & Reisser, L. (1999). Creating inclusive communities. *Good practices in student affairs: Principles to foster student learning*, 157-177.
- Bukowski, W. M., and B. Hoza. 1989. “Popularity and Friendship: Issues in Theory, Measurement, and Outcome.” In *Peer Relationships in Child Development*, edited by T. J. Berndt and G. W. Ladd, 15–45. New York: Wiley.
- Carnevale, A. P., Jayasundera, T., & Gullish, A. (2016). *America’s divided recovery: College haves and have-nots*. Washington, DC: Georgetown University Center on Education and the Workforce.
- CCRC, Community College Research Center (2019). Community College FAQs. (March 2019). Retrieved June 06, 2019, from <https://ccrc.tc.columbia.edu/Community-College-FAQs.html>
- Cejda, B. D. (1994). *Reducing Transfer Shock through Faculty Collaboration: A Case Study*. *Community College Journal of Research and Practice* (Vol. 18, pp. 189–99). Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ479908&site=ehost-live>

- Cejda, B. D. (1997). An examination of transfer shock in academic disciplines. *Community College Journal of Research and Practice*, 21(3), 279-288.
- Cejda, B., Kaylor, A., & Rewey, K. (1998). Transfer shock in an academic discipline: The relationship between students' majors and their academic performance. *Community College Review*, 26(3), 1-13.
- Chin-Newman, C. S. ., & Shaw, S. T. (2013). The Anxiety of Change: How New Transfer Students Overcome Challenges. *Journal of College Admission*, (221), 14-21. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=92504490&site=ehost-live>
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology*, 94, 95-120.
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: qualitative, quantitative, and mixed methods approaches*. Fifth edition. Los Angeles: SAGE.
- Daly, A. J., & Finnigan, K. S. (2011). The Ebb and Flow of Social Network Ties Between District Leaders Under High-Stakes Accountability. *American Educational Research Journal*, 48(1), 39-79. <https://doi.org/10.3102/0002831210368990>
- DeWine, P. R., Bresciani Ludvik, M., Tucker, M., Mulholland, S., & Bracken, W. (2017). Exploring a Successful Community College Student Transition to a Research-University Environment. *Community College Journal of Research and Practice*, 41(12), 809-822. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1156192&site=ehost-live>

- Dika, S. L., & Singh, K. (2002). Applications of social capital in educational literature: A critical synthesis. *Review of Educational Research*, 72, 31–60.
- Eggleston, L. E., & Laanan, F. S. (2001). Making the Transition to the Senior Institution. *New Directions for Community Colleges*, (114), 87–97. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ637695&site=ehost-live>
- Emerson, E., & McVilly, K. (2004). Friendship activities of adults with intellectual disabilities in supported accommodation in Northern England. *Journal of Applied Research in Intellectual Disabilities*, 17, 191–197. doi:10.1111/j.1468-3148.2004.00198.x
- Estell, D. B., Jones, M. H., Pearl, R., & Van Acker, R. (2009). Best friendships of students with and without learning disabilities across late elementary school. *Exceptional Children*, 76, 110–124.
- Ferrans, C. E., & Powers, M. J. (1985). Quality of life index: Development and psychometric properties. *Advances in Nursing Science*, 8(1), 15–24. doi:10.1097/00012272-198510000-00005
- Ginder, S.A., Kelly-Reid, J.E., and Mann, F.B. (2018). 2017–18 *Integrated Postsecondary Education Data System (IPEDS) Methodology Report* (NCES 2018-195). U.S. Department of Education. Washington, DC: National Center for Education Statistics. Retrieved 15 November 2018 from <http://nces.ed.gov/pubsearch>
- Glass, J. C., & Harrington, A. R. (2002). Academic performance of community college transfer student and “native” students at a large state university. *Community College Journal of Research and Practice*, 26, 415-430.

- Handel, S. J. (2013). The transfer moment: The pivotal partnership between community colleges and four-year institutions in securing the nation's college completion agenda. *New Directions for Higher Education*, 162, 5–15. <https://doi.org/10.1002/he.20052>
- Harris, L. N. (2017). Latino Student Persistence Strategies in Transferring from Community College to Tier 1 Universities: A Phenomenological Analysis. *European Journal of Educational Research*, 6(2), 113–122. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1138267&site=ehost-live>
- Herrera, A., & Jain, D. (2013). Building a transfer-receptive culture at four-year institutions. *New Directions for Higher Education*, 162, 51–59. <https://doi.org/10.1002/he.20056>
- Hills, J. R. (1965). Transfer shock: The academic performance of the junior college transfer. *Journal of Experimental Education*, 33(3), 201-215.
- Howes, C. (1983). Patterns of friendship. *Child Development*, 54, 1041–1053.
doi:10.2307/1129908
- Horn, L. (2009). *On Track to Complete? A Taxonomy of Beginning Community College Students and Their Outcomes 3 Years After Enrolling: 2003–04 Through 2006* (NCES 2009-152). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.
- Ishitani, T. T. (2008). How do transfers survive after “transfer shock”? A longitudinal study of transfer student departure at a four-year institution. *Research in Higher Education*, 49(5), 403–419.

- Ivins, T., Copenhaver, K., & Koclanes, A. (2016). Adult transitional theory and transfer shock in Higher education practices from the literature. *Reference Services Review*, 45(2), 244-257.
- Jackson, D. L., & Laanan, F. S. (2015). Desiring to Fit: Fostering the Success of Community College Transfer Students in STEM. *Community College Journal of Research and Practice*, 39(2), 132–149. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1044287&site=ehost-live>
- Jacobson, T., Delano, J., Krzykowski, L., Garafola, L., Nyman, M., & Barker-Flynn, H. (2017). Transfer student analysis and retention: A collaborative endeavor. *University Libraries Faculty Scholarship*, 100, 1-31.
- Jain, D., Herrera, A., Bernal, S., & Solorzano, D. (2011). Critical race theory and the transfer function: Introducing a transfer receptive culture. *Community College Journal of Research and Practice*, 35(3), 252–266. <https://doi.org/10.1080/10668926.2011.526525>
- Jobling, A., Moni, K. B., & Nolan, A. (2000). Understanding friendship: Young adults with Down syndrome exploring relationships. *Journal of Intellectual & Developmental Disability*, 25, 235–245. doi:10.1080/13269780050144299
- Kossinets, G., & Watts, D. J. (2006). Empirical analysis of an evolving social network. *Science*, 311, 88–90.
- Laanan, F. S. (2000). *Beyond Transfer Shock: Dimensions of Transfer Students' Adjustment*. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED442494&site=ehost-live>

- Laanan, F. S., & ERIC Clearinghouse for Community Colleges, L. A. C. (2001). Transfer Students: Trends and Issues. *New Directions for Community Colleges*, Number 114. The Jossey-Bass Higher and Adult Education Series. *New Directions for Community Colleges*, 29(2). Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED456889&site=ehost-live>
- Laanan, F. S. (2001). Transfer student adjustment. *New Directions for Community Colleges*, 114, 5–13. <https://doi.org/10.1002/cc.16>
- Laanan, F. S. (2004). Studying Transfer Students: Part I: Instrument Design and Implications. *Community College Journal of Research and Practice*, 28(4), 331–351. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ682216&site=ehost-live>
- Laanan, F. S. (2007). Studying Transfer Students. Part II: Dimensions of Transfer Students' Adjustment. *Community College Journal of Research & Practice*, 31(1), 37–59. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ752411&site=ehost-live>
- Laanan, F. S., Starobin, S. S., & Eggleston, L. E. (2010). Adjustment of community college students at a four-year university: Role and relevance of transfer student capital for student retention. *Journal of College Student Retention: Research, Theory & Practice*, 12(2), 175–209.

- Lareau, A., Wininger, E. B., & Cox, A. (2018). Parental Challenges to Organizational Authority in an Elite School District: The Role of Cultural, Social, and Symbolic Capital. *Teachers College Record*, 120(1), 1-2
- Lin, N. (2001). *Social capital: A theory of social structure and action*. New York, NY: Cambridge University Press.
- Lockwood, P., Hunt, E., Matlack, R., & Kelley, J. (2013). From community college to four-year institution: A model for recruitment and retention. *Community College Journal of Research & Practice*, 37(8), 613–619.
- McGowan, R. A., & Gawley, T. (2006). The University Side of the College Transfer Experience: Insights from University Staff. *College Quarterly*, 9(3). Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ835417&site=ehost-live>
- McPherson, J. M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. In J. Hagan & K. S. Cook (Eds.), *Annual review of sociology* (Vol. 27, pp. 415–444). Palo Alto, CA: Annual Reviews.
- Merriam, S. and Tisdell, E. (2016). *Qualitative research*. 1st ed. San Francisco, CA: Jossey-Bass.
- Miller, A. (2013). Institutional Practices that Facilitate Bachelor's Degree Completion for Transfer Students. *New Directions for Higher Education*, (162), 39–50. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1014826&site=ehost-live>
- Newcomb, A. F., & Bagwell, C. L. (1996). The developmental significance of children's friendship relations. In W. M. Bukowski, A. F. Newcomb, & W. W. Hartup (Eds.), *The*

- company they keep: Friendship in childhood and adolescence* (pp. 289–321). New York, NY: Cambridge University Press. NSD. (2016). *Norwegian Social Science Data Services*. Retrieved February 1, 2015, from <http://www.nsd.uib.no/nsd/english/index.html>
- Ornelas, A., & Solorzano, D. G. (2004). Transfer conditions of Latina/o community college students: A single institution case study. *Community College Journal of Research and Practice*, 28(3), 233–248. <https://doi.org/10.1080/10668920490256417>
- Patton, L. D. (2010). *Culture centers in higher education: Perspectives on identity, theory, and practice*. Herndon, VA: Stylus Publishing, LLC.
- Pennington, R. (2006). Rethinking Grade Transfer Shock: Examining its Importance in the Community College Transfer Process. *Journal of Applied Research in the Community College*, 14(1), 19–33. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ774443&site=ehost-live>
- Peska, S. F., & Broome Community College, I. for C. C. R. (2009, January 1). *Timing Is Everything: A Comparative Study of the Adjustment Process of Fall and Mid-Year Community College Transfer Students at a Public Four-Year University. Working Paper Series. Number 1-10. Institute for Community College Research*. Institute for Community College Research. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED535816&site=ehost-live>
- Respondek, L., Seufert, T., Stupnisky, R., & Nett, U. E. (2017). Perceived academic control and academic emotions predict undergraduate university student success: Examining effects

- on dropout intention and achievement. *Frontiers in Psychology*, 8(243), 1-18. doi: 10.3389/fpsyg.2017.00243.
- Rhine, T. J., Nelson, L. R., & Milligan, D. M. (2000). Alleviating transfer shock: Creating an environment for more successful transfer students. *Community College Journal of Research and Practice*, 24(6), 443-453.
- Sandeen, A., & Barr, M. J. (2014). *Critical issues for student affairs: Challenges and opportunities*. San Francisco, CA: John Wiley & Sons.
- Schlossberg, N. K. (1989). *Improving higher education environments for adults: Responsive programs and services from entry to departure*. San Francisco, CA: Jossey-Bass.
- Schmidt, D. & Wartick, M. (2013). Performance in upper-level accounting courses: The case of transfer students. *Advances in Accounting Education*, 14, 171-192.
- Scott, T. P., Thigpin, S. S., & Bentz, A. O. (2017). Transfer learning community: Overcoming transfer shock and increasing retention of mathematics and science majors. *Journal of College Student Retention*, 19(3), 300-316.
- Shapiro, D., Dundar, A., Huie, F., Wakhungu, P., Yuan, X., Nathan, A & Hwang, Y., A. National Student Clearinghouse Research Center. (2017). A National View of Student Attainment Rates by Race and Ethnicity--Fall 2010 Cohort (Signature Report No. 12b). *National Student Clearinghouse*. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED580302&site=ehost-live>
- Shapiro, D., Dundar, A., Huie, F., Wakhungu, P.K., Yuan, X., Nathan, A. & Hwang, Y. National Student Clearinghouse Research Center. (2017). *Tracking Transfer: Measures of Effectiveness in Helping Community College Students to Complete Bachelor's Degrees*.

(Signature Report No. 13). National Student Clearinghouse. National Student Clearinghouse. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED580214&site=ehost-live>

Shaw, S. T., & Chin-Newman, C. S. . (2017). “You Can Do It!” Social Support for Transfer Students During the Transition From Community College to a Four-Year

University. *Journal of the First-Year Experience & Students in Transition*, 29(2), 65–78.

Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=eue&AN=127116016&site=ehost-live>

Sigstad, H. M. H., Stray-Pedersen, A., & Frøland, S. S. (2005). Coping, quality of life, and hope in adults with primary anti- body deficiencies. *Health and Quality of Life Outcomes*, 3 (31), 1–13. doi:10.1186/1477-7525-3-31

Snijders, T., Steglich, C., & Schweinberger, M. (2007). Modeling the co-evolution of networks and behavior. In K. van Montfort, H. Oud, & A. Satorra (Eds.), *Longitudinal models in the behavioral and related sciences* (pp. 41–71). Mahwah, NJ: Lawrence Erlbaum.

Snyder, T.D., de Brey, C., and Dillow, S.A. (2018). *Digest of Education Statistics 2016* (NCES 2017-094). National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education. Washington, DC.

Spady, W. G. (1970). Dropouts from higher education: An interdisciplinary review and synthesis. *Interchange*, 1, 64-65.

- Thurmond, K. C. (2007). Transfer shock: Why is a term forty years old still relevant? Retrieved from NACADA Clearinghouse of Academic Advising Resources:
<http://www.nacada.ksu.edu/Resources/Clearinghouse/View-Articles/Dealing-with-transfer-shock.aspx>.
- Tinto, V. (1975). Dropout From Higher Education: A Theoretical Synthesis of Recent Research. *Review of Educational Research*. Retrieved from
<http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ120200&site=ehost-live>
- Tinto, V. (1993). *Leaving College: Rethinking the Causes and Cures of Student Attrition*. Second Edition. Retrieved from
<http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED371658&site=ehost-live>
- Tinto, V. (2017). Through the Eyes of Students. *Journal of College Student Retention: Research, Theory & Practice*, 19(3), 254–269. Retrieved from
<http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ1156655&site=ehost-live>
- Townley, G., Katz, J., Wandersman, A., Skiles, B., Schillaci, M. J., Timmerman, B. E., & Mousseau, T. A. (2013). Exploring the role of sense of community in the undergraduate transfer student experience. *Journal of Community Psychology*, 41(3), 277-290.
- Townsend, B. K. (1993). *University Practices That Hinder the Academic Success of Community College Transfer Students*. Retrieved from
<http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED363360&site=ehost-live>

- Townsend, B. K. (1995). *Community College Transfer Students: A Case Study of Survival*. *Review of Higher Education* (Vol. 18, pp. 175–93). Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ499545&site=ehost-live>
- Townsend, B. K., & Wilson, K. (2006). “A Hand Hold for a Little Bit”: Factors Facilitating the Success of Community College Transfer Students to a Large Research University. *Journal of College Student Development*, 47(4), 439–456. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ744007&site=ehost-live>
- Townsend, B. K. (2008). “Feeling like a freshman again”: The transfer student transition. *New Directions for Higher Education*, 144, 69–77.
- Townsend, B. K., & Wilson, K. B. (2009). The Academic and Social Integration of Persisting Community College Transfer Students. *Journal of College Student Retention: Research, Theory & Practice*, 10(4), 405–423. Retrieved from <http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ832978&site=ehost-live>
- UCLA Undergraduate Admission. (2018). Profile of Admitted Transfer Students Fall 2018. Retrieved November 12, 2018, from https://www.admission.ucla.edu/prospect/Adm_tr/Tr_Prof18.htm
- University of California Office of the President Transfer Action Team. (2014). *Preparing California for its future: Enhancing community college student transfer to UC*. Retrieved from <https://www.ucop.edu/transfer-action-team/transfer-action-team-report-2014.pdf>

- University of California Office of the President (2018, April 18). *Enhancing student transfer—A memorandum of understanding between the California community colleges and the University of California*. Retrieved from <https://www.universityofcalifornia.edu/sites/default/files/UC-CCC-MOU.pdf>
- U.S. Census Bureau (2009, January). Educational attainment in the United States: 2007 population characteristics. Retrieved on October 16, 2009 from <http://www.census.gov/population/www/socdemo/educ-attn.html>.
- US Department of Education. (2011). Meeting the nation's 2020 goal: State targets for increasing the number and percentage of college graduates with degrees. Washington, DC. *National Center for Education Statistics*. Retrieved from http://www.whitehouse.gov/sites/default/files/completion_state_by_state.pdf
- U.S. Department of Education. Institute of Education Sciences, National Center for Education Statistics. (2019). *The Condition of Education: Undergraduate Enrollment*. Retrieved 23 June 2019 from https://nces.ed.gov/programs/coe/indicator_cha.asp
- Van der Zaden, P. J., Denessen, E., & Gillessen, P. C. (2018). Domains and predictors of first-year student success: A systemic review. *Educational Research*, 23, 57-77.
- Venezia, A. & Kirst, M. W. (2005). Inequitable opportunities: How current education systems and policies undermine the chances for student persistence and success in college. *Educational Policy*, 19(2), 283-307.
- Wasserman, S., & Faust, K. (1994). *Social network analysis: Methods and applications*. Cambridge: Cambridge University Press.
- Xu, D., Ran, F. X., Fink, J., Jenkins, D., Dundar, A., Columbia University, C. C. R. C., ... Aspen Institute. (2017). *Strengthening Transfer Paths to a Bachelor's Degree: Identifying*

Effective Two-Year to Four-Year College Partnerships. CCRC Working Paper No. 93.

Community College Research Center, Teachers College, Columbia University.

Community College Research Center, Teachers College, Columbia University. Retrieved from

<http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=ED586481&site=ehost-live>

Young, J., & Litzler, E. (2013). Confirmatory factor analysis of transfer student adjustment.

Community College Journal of Research & Practice, 37(11), 877–891.

Zhai, L., & Newcomb, L. H. (2000). Factors that influence transfer students' academic performance and retention. *ERIC Report*. ED47482.