FAMILIAR FACES AND NEW CONNECTIONS: THE IMPACT OF FRIENDS, OLD AND NEW, ON BELONGING AND SCHOOL CONNECTEDNESS DURING THE TRANSITION TO COLLEGE

by

MARY MITCHELL MORRIS

(Under the Direction of Michele Lease)

ABSTRACT

Supportive peer relationships are central to a successful transition to college. However, less is known about how both *familiar* ties (pre-existing relationships) and *new* ties (relationships formed after arriving on campus) contribute to students' sense of belonging and school connectedness during the early transition period. This study examined the role of these distinct peer connections in the emerging personal networks of first-year students at the University of Georgia using an ego-centric network methodology. Participants included 143 first-year students who identified members of their personal networks approximately 4–8 weeks after arriving on campus. For each network member, students provided demographic and contextual information and reported whether they knew the person prior to starting college. Participants also completed measures of general belongingness and school connectedness. Results indicated that the presence of familiar ties did not predict general belongingness, but greater perceived closeness with familiar ties was associated with higher belongingness for men. The number of new ties significantly predicted students' school connectedness, and instrumental support from new ties enhanced connectedness. Pre-college extracurricular involvement did not significantly predict

the number of new ties formed. This study highlights how the ego-centric network approach can capture the nuanced structure and function of students' support networks and provides implications for supporting students' early college adjustment.

INDEX WORDS: Peer networks, ego-centric network analysis, college transition, belongingness, school connectedness, familiar ties, new ties, instrumental support

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MARY MITCHELL MORRIS

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MARY MITCHELL MORRIS

Major Professor:	A. Michele Lease
Committee:	Stacy Neuharth-Pritchett Robert Seagraves Georgianna Martin

Electronic Version Approved:

Ron Walcott
Dean of the Graduate School
The University of Georgia
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DEDICATION

To my new connections, the best friends I made in college who are still my greatest source of laughter, strength and belonging. You all have made every season brighter and every milestone sweeter. Thank you for all your love and support throughout the years!

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CHAPTER 1

INTRODUCTION

The college experience begins with the transition from home to campus, a time that is characterized by disruptions to students' typical roles, routines, and relationships (Chickering & Schlossberg, 2002; Killam & Degges-White, 2017). Students' transition to college coincides with the emerging adulthood phase of development, a period of time defined by transition events, such as leaving home, entering the workforce or pursuing postsecondary education (Arnett, 2007). Transition Theory (Schlossberg, 2008) provides a framework for understanding how college students might cope with and navigate the transition to college (Killam & Degges-White, 2017). Transition Theory emphasizes the importance of college students' support, or the resources and people who strengthen and encourage them when they are navigating a challenging transition (Killam & Degges-White, 2017).

Belongingness and College Connectedness

During the college transition, students might be more at risk of feeling unsupported due to relocating and leaving an existing support network, composed of family, friends, teachers, coaches etc. from home. College students' sense of belonging might be impacted by them feeling unsupported (Strayhorn, 2018) as they lose a previous support network and begin to develop another within their college environment. Feeling like one belongs is a fundamental human need (Baumeister & Leary, 1995; Maslow, 1943) defined by a general sense of affiliation or being part of and accepted by a group. However, students' experiences of belonging are not uniform and can be significantly shaped by social identity. Research has found that students who self-

identify as part of majority group (e.g., race/ethnicity, sexual orientation, religious affiliation, etc.) reported a stronger sense of belonging than those in non-majority groups (Fan et al., 2021).

Gaining a sense of belonging is not something that an individual acquires on their own, but rather something that is provided by individuals, groups, or institutions within a certain social context (Nunn, 2021). Nunn (2021) conceptualizes college belonging into three distinct categories: social belonging, campus-community belonging, and academic belonging. Nunn's research (2021) emphasizes that belonging is dynamic and individual. For example, the need for one type of belonging might be more significant at the beginning but not at the culmination of a student's college experience. Social belonging (i.e., feeling that one belongs to a group or group of friends) might be more important during the first-year of college due to students seeking out a new peer network in the college environment (Nunn, 2021). Campus-community belonging is extended from the college community or institution itself and results in students feeling welcome and 'at home' on campus. A similar construct, school connectedness, is characterized by students' perceived school membership as well as perceptions of fitting into one's college environment (Civitci, 2015; Pittman & Richmond, 2007).

School connectedness, or feelings of belonging within the college context, also involves students' satisfaction with and a sense of belonging provided by their relationships on campus (Civitci, 2015; Farrell et al., 2018; Rovai, 2002). Relationships that impact school connectedness include those with peers who are dealing with similar stressors and challenges. Strayhorn (2018), a college student development researcher, emphasizes the importance of college students' experience of 'mattering' (i.e., feeling cared about, accepted, respected, and valued by their campus community) as a primary contributor to their sense of connectedness and belonging on campus. Gender is associated with students' experiences of school connectedness (Ruedas-

Garcia et al., 2023). For example, a four-year longitudinal study examining 'university belonging' (i.e., the extent to which students see themselves as a part of or member of the campus community) found that students identifying as female reported lower levels of 'university belonging' compared to their male counterparts (Ruedas-Garcia et al., 2023). Prior research has demonstrated making the transition to a new support system is not just important for feelings of school connectedness but also academic adjustment. One study by Pittman and Richmond (2007) found that, in a sample of second-semester freshman (N = 266), school belonging (i.e., college connectedness) significantly predicted both academic and psychological adjustment, including feelings of self-worth.

Characteristic of Personal Networks

To establish a sense of belonging and connectedness to campus, it is important for college students to develop a campus-based personal support network. Personal networks are composed of many different relationships that vary in connection, intimacy, frequency of contact, proximity, and other characteristics (Perry et al., 2018). In ego-centric network analysis, a type of social network analysis focused on individuals' personal networks, the 'tie' between two individuals (i.e., nodes) can reflect different types of connections (e.g., friendship, advice-giving; Perry et al., 2018). In personal networks, 'ego' is the central individual in a network and 'alters' are individuals who are connected to or in relationship with 'ego.' Thus, ego-nets are personal networks composed of one centralized ego and ego's alters (Perry et al., 2018). Ego-centric network research is conceptually and statistically useful in examinations of college students' personal networks.

The quality of connections within ego-networks is often examined through the concept of tie strength. Tie strength is defined as the intensity and duration of bonds between an ego and

alter within a network (Marsden & Campbell, 1984; Perry et al., 2018). The most common way to operationalize tie strength is through frequency of contact, duration of relationship, and emotional intimacy (Perry et al., 2018). Strong ties are multidimensional in that they can fulfill multiple social support roles, functions, and exchanges, enhancing feelings of connectedness and belonging (Perry et al., 2018). Social support functions and exchanges can include emotional support, such as encouragement and offering comforting reassurance, as well as instrumental forms of support, including provision of information on resources or access to new opportunities (Mendelson & Abound, 1999). Taken together, personal networks that are composed of relationships that an individual feels comfortable with, speaks to often, and have known for a significant amount of time could be indicative of a strong network.

Research suggests that, on average, personal social networks include fewer than 10 close ties and approximately 20 people with whom one interacts with weekly (Perry et al., 2018). Who people draw support from and discuss important matters with, referred to in social network literature as the 'core discussion network' (Perry et al., 2018), has been theorized to be composed of an individual's closest relationships and is expected to be largely stable (Marsden, 1987). However, other research suggests that when actors enter new institutional environments, such as college, their discussion networks change quickly because routine activities they engage in are quickly transformed (Small et al., 2015). Research on new college friendships has demonstrated the importance of these new relationships. For example, college students finding new friends who are trustworthy and loyal is predictive of academic achievement and associated with a higher grade point average during the first semester of college (Goguen et al., 2010).

In addition to social-emotional support, network ties also provide instrumental support, a type of exchange related to social capital, or the resources from network members that can be

cultivated and exchanged through the maintaining of network relationships (Perry et al., 2018). Research on social capital emphasizes the importance of also having 'weak ties,' especially for obtaining important, novel information and resources, as 'strong ties' often have redundant information gathered from shared experience (Portes, 2000). This concept aligns with research on the number of ties in an individual's personal network (Perry et al., 2018) and, specifically, how the social ties that an individual interacts with on a weekly basis likely provide different types of support. During instances when weak ties either have knowledge that an individual requires or are available when important issues arise, individuals might discuss important matters with weak ties to whom they do not necessarily feel emotionally attached (Small, 2013).

Cultural capital (Bourdieu, 1977a) refers to the skills, experiences, knowledge and behaviors that are valued within a specific social context. This form of capital might involve familiarity with institutional contexts, processes, and expectations as well as having relevant knowledge and social competence (Edgerton & Roberts, 2014). Similar to cultural capital, habitus (Roksa & Robinson, 2017; Bourdieu, 1977b) refers to the unconscious and embodied manner that individuals behave in and experience social environments. While habitus is influenced by an individual's social upbringing, it is not a static concept—new experiences or environments have the capability of molding one's habitus (Edgerton & Roberts, 2014). Having valued cultural capital and habitus-field congruence (i.e., habitus that aligns well within a certain context) (Edgerton &Roberts, 2014) gives individuals an advantage as they navigate new social environments. This concept could apply generally to students transitioning to college, or, on a smaller level, joining new structured social groups during the transition to college (e.g., clubs, geek life, intramural sports).

Social Development and Involvement

When examining the social support functions of a college student's emerging college-based network, a helpful theoretical framework to consider is Kahn and Antonucci's (1980) social convoy model. This model provides an approach to understanding how changes in networks during pivotal transitions and support from one's social convoy can influence development and well-being. Specifically, an individual's social convoy is composed of their close relationships and important social ties, which are multi-faceted and influence individuals' well-being (Antonucci et al., 2010). An important tenet of the convoy model is that the convoy is dynamic, flexible and changes over the lifespan due to developmental and contextual demands. The creation of a social convoy to help individuals meet those demands is influenced by the interaction between personal characteristics, which influence the type of social relationships an individual seeks, needs, and develops, and situational characteristics, such as where a person lives and works as well as the roles and demands placed on the individual (Antonucci et al., 2010). Similarly, social cognitive theory (Bandura, 1986) illustrates that human behavior results from dynamic interactions between personal and environmental variables (Mason et al., 2009), while emphasizing that people play an active role in their adaptation to their environments (Bandura, 1986).

The interplay between individuals and the environment is especially evident during the transition to college, where students must actively construct new networks of support within an unfamiliar setting. Creating and developing a new personal network in college relies on social skills and competencies that are often cultivated before students even arrive on campus. During adolescence, several key elements of an individual's social environment lay the foundation for these skills. These include not only peer networks and family relationships but also participation

in extracurricular activities (Mason et al., 2009). Adolescents both seek out and select different extracurricular activities where they gain skills, form relationships and, in turn, develop different components of their identity. Adolescents develop various self-competencies through participation in extracurricular activities, such as leadership skills, interpersonal skills, social-emotional skills, and self-efficacy (Berger et al., 2020; Brooks et al., 2014; Hancock et al., 2012), which aligns with the components of social cognitive theory (Bandura, 1986). For younger adolescents, feeling accepted and valued within the context of extracurricular activities can impact a sense of belonging within their larger school community. One study conducted in Singaporean primary schools found that peer acceptance in co-curricular activities leads to students adopting of mastery goals (i.e., goals that are focused on learning and self-improvement) (Liem & Frericks, 2025). This in turn was linked to a broader sense of school belonging, or feeling personally accepted, respected, and included by others in the school environment (Liem & Fredericks, 2025). This sense of belonging not only enhances social connectedness but also contributes to other aspects of student adjustment, including academic success. Participation in school-based extracurricular activities during high school has also been linked to greater levels of academic adjustment, including greater academic achievement, positive attitudes toward school, and greater academic aspirations (Darling et al., 2005). Not only is participation in extracurricular activities beneficial for adjustment in adjustment in high school but might also set up students for success in college. The skills and social experiences that adolescents gain through participating in extracurricular will likely serve them well as they initially navigate the college landscape. Extracurricular activities can provide a framework for how to get involved in a new context.

Through the structured engagement of extracurriculars, protective factors such as increased sense of belongingness are fostered in adolescents (Mason et al., 2009). Specifically, through shared interests and participation, adolescents attain a sense of validation, safety and belonging that promotes identity development (Berger et al., 2020). Moreover, the structured engagement in extracurricular activities not only fosters a sense of belonging but also influences peer relations through the formation of crowds. These crowds, characterized by shared common reputations, play a crucial role in adolescent identity development, often reflecting the types of activities in which students participate (Brown, 1999; Brown & Klute, 2006). Crowds often are differentiated by lifestyle characteristics (Sussman et al., 2006) or patterns of shared values (Brown, 1999) and can be associated with positive or negative behaviors. Crowds shape social identity and impact skill development. Common crowds identified in research include groups associated with athletics, academics, and performing arts (Eccles & Barber, 1999; Schaefer et al., 2011). These reputational groups can attract students by offering unique opportunities and experiences. For example, athletic groups can draw in students due to the camaraderie associated with sports teams, thereby influencing their social experiences and identity development.

Participation in extracurricular activities during high school not only helps students develop a sense of identity and belonging but also equips them with essential social skills. These experiences foster the ability to connect with peers who share similar interests and develop a multifaceted identity beyond academics. Moreover, the benefits of participating in activities beyond academic courses are not limited to high school. Astin's Theory of College Student Involvement (1999) stresses that the greater the amount of energy that students invest in their college experience, the greater their overall learning and personal development. Participating in extracurricular activities as well as interacting with faculty and institutional personnel are forms

of involvement that students can take part in during their college experience (Astin, 1999). Research has demonstrated that college students who are more engaged in academic and social activities earned higher grades and report higher levels of satisfactions with their college experience (Webber et al., 2013). Astin (1999) posited that involvement occurs along a continuum where students invest different amounts of energy into various activities and relationships at various times throughout their college experience (Milem & Berger, 1997). During the first year of college, other researchers have emphasized the importance that involvement has on incorporation into the college environment, or when students adapt and adopt prevailing norms and behavior patterns of their campus communities (Milem & Berger, 1997). This adoption of campus norms and behaviors aligns with the previous discussed concept of students' habitus molding and changing after transitioning to a new environment (Edgerton & Roberts, 2014).

In sum, developing one's college support network is a major task for college students as they transition from home to campus. The developmental tasks and transition markers of emerging adulthood – the developmental stage including most college students – often lead to changes in social network size, composition, proximity, and contact frequency (Manalel & Antonucci, 2022). Creating and developing a new personal network in college involves social skills and competencies that are often developed before students step foot on campus. Adolescents' high school experiences (i.e., participation in extracurricular activities) can help students gain the required skills and experiences that are useful when developing new ties and becoming involved within the campus community.

CHAPTER 2

LITERATURE REVIEW

There are many ways that high school students planning on attending post-secondary education prepare to ease the transition to college. Some preparation is unintentional and tacit, gained through social experiences where students learn interpersonal skills through forming, navigating, and maintaining close relationships with both peers and adults. Student-initiated practices, such as developing study habits or participating in extracurricular activities, help prepare students for the academic and social demands of college life. Students' sociodemographic characteristics and circumstances, such as whether enrolling from an in-state or out-of-state high school, also affect the ease of the transition to college. At large state universities, which attract a high number of students from local high schools, many students will enter college with friends and familiar social ties from high school. For in-state students, pre-existing social ties likely provide a source of comfort and support during the transition. Many out-of-state students, however, face the immediate challenge of building a college peer network from the ground up.

Regardless of residency status, having continued contact with friends who are not attending the same university might fulfill general sense of belonging needs during the transition to college (Swenson et al., 2008) but also might inhibit the formation of new ties. Evidence supports the importance of building a peer network comprised of students on their new college campus (Bowman, 2010; Swenson et al., 2008), which enhances a sense of connectedness to college and academic adjustment. Research indicates that having new relationships within the

college context is critical for better college adjustment (Swenson et al., 2008), retention, and persistence (Goguen et al., 2010; Skahill, 2002). Therefore, it is important to understand how students' pre-college variables, including sociodemographic characteristics and prior experiences, as well as both their familiar and newly formed relationships influence students' transition to college and the development of a college-based support network.

Personal Network Emergence and Transformation

The convoy model of social relations is a useful theoretical framework for understanding the role of personal networks in adaptation (Antonucci et al., 2010; Kahn & Antonucci, 1980). An individual's convoy, which is composed of their close relationships and important social ties (Antonucci et al., 2010), is dynamic across the lifespan, changing to meet both new developmental tasks and environmental demands (Manalel & Antonucci, 2022). An important aspect of the convoy model is that social relationships typically are multifaceted in that they serve different functions or provide different types of social support (Antonucci et al., 2010). The three main categories of social support are aid, affect, and affirmation (Kahn & Antonucci, 1980). Aid refers to instrumental support that relationships offer, such as assisting with tasks or helping a friend study for a test. Affect involves emotional support that is typically common among close relationships, such as family members or close friendships. Affirmation does not necessarily involve tangible aid or emotional support but instead encompasses support in the form of acceptance and agreement (Antonucci et al., 2010; Kahn & Antonucci, 1980). Having a supportive convoy has been found to be associated with psychosocial adjustment (Levitt, 2005). It is important for convoys to be adaptive and dynamic (Antonucci et al., 2010). An optimally functioning social convoy will change to meet the demands of an individual's specific needs depending on their life stage and/or contextual demands (Antonucci et al., 2019; Manalel &

Antonucci, 2022). For students leaving home and entering college, establishing a social convoy on campus that is composed of supportive ties is critical to help meet the substantial social and academic task demands presented within this new environment.

The formation of a network of high-quality relationships and social ties, who provide and exchange social support during the first year of college, is related to a range of positive outcomes (Bowman, 2010), including both social and academic adjustment as well as institutional attachment (Buote et al., 2007). In a study including 271 first-year college students, researchers found that forming new, high-quality relationships with college peers is an important factor for students' formation of an institutional attachment to their new school (Swenson et al., 2008). This might suggest a new, college-based network can fulfill affirmative support functions (i.e., students feel more attached to an institution because they feel affirmed and accepted by their peers at the institution). Another longitudinal study of 1,845 undergraduate participants indicated that new friendships help university students acclimate to their environment through providing a sense of belonging, offering emotional support, and being a source of fun and enjoyment (Buote et al., 2007). Moreover, a large study (Bowman, 2010) conducted with college students (N = 4,501) from liberal arts colleges, community colleges, and research universities illustrated forming quality peer relationships during the first year of college significantly impacts various aspects of psychological well-being, such as purpose in life and environmental mastery, across a range of institution types. In this study, women reported higher levels on nearly all dimensions of psychological well-being, which might reflect developmental differences common in early adulthood (Bowman, 2010). These studies highlight the importance of support provided by a student's convoy as they navigate the transition to college and demonstrate that a new network of social support at college can fulfill both affective and affirmative social support functions.

Although the formation of new networks within the college context is important, prior friendships from high school (i.e., relationships that are maintained but who are not at the same institution) also play a role during the transition to college. Friendships from high school are significant and protective during the first few weeks of the college transition (Swenson et al., 2008) and maintaining a satisfying best friendship from high school can be important for buffering loneliness during the transition (Oswald & Clark, 2003). This is likely due to existing high school friendships satisfying new college student's general need to belong, which is a fundamental human need (Baumeister & Leary, 1995; Maslow, 1943). However, those who have close social bonds might be less interested in forming additional relationships (Baumeister & Leary, 1995). That is, an individual whose feelings of belonging are satisfied, or 'satiated,' might have diminished motivation to seek out new relationships (Baumeister & Leary, 1995).

Focusing too much on established relationships with others who are not on the same campus might have a detrimental impact on a student's transition to college. This aligns with a key tenet of the social convoy model: optimally functioning convoys are flexible and help individuals adapt to meet new demands brought on by new circumstances (Antonucci et al., 2010; Antonucci et al., 2019; Manalel & Antonucci, 2022). One short-term study conducted at a small state college (N = 70) illustrated how first year students' preoccupation with losing precollege friends who did not matriculate to the same institution (i.e., 'friendsickness') is linked with poor college adjustment (Paul & Brier, 2001). In the study, 'friendsickness' was associated with loneliness, poor self-esteem, and having more precollege friends in one's social network, and 'friendsick' students expressed insecurity in their ability to make new, close, and trustworthy friends during the transition to college (Paul & Brier, 2001). It is possible that this insecurity is related to a lack of pre-college experience with forming new ties and building new, close

relationships with peers. Another mixed-method study found that students who maintained close ties with their previous friends were less likely to form new friendships and that residency status played a central role in these relationship dynamics (Benson, 2007). The majority of the sample in this particular study (57%) were either living at home or commuting to college. Students who lived on campus were more likely to separate from their high school friends and establish new friendships within the college community (Benson, 2007). However, off-campus students, as well as on-campus students who attended college with a close friend, were less likely to form new close friendships during the transition to college (Benson, 2007).

According to Tinto's model of student departure (1994), the formation of new, close ties with other college students is important for new students to become socially connected within their college community. During college, the human need to belong becomes especially significant for new students (Strayhorn, 2018). This is not necessarily the result of a lack of existing friendships, but because forming meaningful connections within the campus environment is essential for fostering support and social connection (Tinto, 1994). In general, social connectedness is referred to as an enduring sense of interpersonal closeness with the social world (Lee et al., 2002; Lee & Robbins, 1995). Within the college context, connectedness is conceptualized as a multidimensional construct that involves a student's sense of belonging, integration, and satisfaction with their relationship to their institution (Farrell et al., 2018; Rovai, 2002). College students who do not perceive they belong, based on perceived support and feelings of connectedness to the college context, tend to not stay in college (Strayhorn, 2018). Conversely, positive outcomes, such as higher levels of emotional well-being and less loneliness, are associated with higher degrees of social connectedness (Farrell et al., 2018).

Prior Experience, Preparation, and Characteristics Influencing the Transition

Both experiences from the first few weeks of college (i.e., proximal factors) and those from high school or a students' home life (i.e., distal factors) can contribute to a successful transition to college as well as the formation of a college-based support network. Distal factors that impact a student's transition to college include sociodemographic characteristics as well as preparation and experiences gained prior to college, which are broadly conceptualized as 'pre-college variables.' Pre-college variables impact a students' experience as they transition to college and ultimately their degree attainment (Astin & Oseguera, 2012). These variables range broadly from sociodemographic characteristics, such as gender or parental income, to outcomes from high school, like GPA, high school involvement, or standardized test scores (Astin & Oseguera, 2012). Students' aspirations, goals, and self-confidence before entering college could also be conceptualized as precollege personal characteristics (Astin & Oseguera, 2005; Astin & Oseguera, 2012).

Students' preparation and experiences prior to college are densely interconnected. For example, it has been established that college students who were more involved during their high school years (i.e., participate in more extracurriculars for more years of high school) are more likely to earn a bachelor's degree than students who participated in fewer high school activities (Gardner et al., 2020). This aligns with theoretical work that suggests high school involvement provides opportunities for individuals to develop academic values and resources as well as self-confidence and perseverance (Gardner et al., 2020; Lerner et al., 2015). Specifically, Lerner's theory of positive youth development details the mechanisms that link adolescent extracurricular participation and development (Lerner et al., 2015). Positive youth development is characterized by adolescents thriving and flourishing as well as developing five attributes: competence, confidence, character, connection and caring (Burkhard et al., 2020). Lerner maintains that

organized youth activities (i.e., extracurriculars) provide opportunities for adolescents to develop supportive relationships with adults, to engage in leadership and skill-building activities, and for community involvement, all of which contribute to positive development (Lerner, 2009). It is also likely that experiences gained from a wide variety of social activities provide one with the confidence, experience, and interpersonal skill to make forming new social ties easier.

Current Study

Prior research has demonstrated that the development of new social ties and formation of a new personal network within the college context is important for student success (Buote et al., 2007; Tinto, 1994). But what if someone in this 'new' personal network is a familiar face? Both the quality and strength of social relationships during the transition to college play a part in students adjusting to their new environment (Bowman, 2010; Perry et al., 2018; Pittman & Richmond, 2007). Moreover, the *types* of contacts within these new support networks likely also matter, specifically whether these networks include *familiar ties* (i.e., relationships established prior to starting college) or *new ties* made on the college campus. These *types* of social ties may fulfill differing types of social support needs.

In the current study, I examine the role that familiar and new ties play in students' peer support networks during the transition to college. Whereas new ties might enhance feelings of connectedness to the college community, familiar ties might facilitate a general sense of belonging to help bridge the gap between support provided by an individual's social convoy from their high school years and the formation of a new, college-based support network. Although the literature on gender is mixed, with some studies indicating better adjustment for women (e.g., Bowman, 2010) and others indicating better adjustment for men (e.g., Fan et al., 2021), I include gender as a covariate in analyses of study questions.

Familiar Ties

The first set of research questions focuses on familiar ties (i.e., relationships established prior to arriving on campus). Maintaining a best friendship from high school can buffer loneliness during the transition to college (Oswald & Clark, 2003), but a pre-occupation with losing an established network of precollege friends (i.e., 'friendsickness') is linked with poor college adjustment (Paul & Brier, 2001). Prior studies surrounding best friendships and 'friendsickness' during the transition to college often conceptualizes 'high school friendships' as relationships that were established prior to arriving on campus but with those whom do not attend the same college institution. But what about high school friends that matriculate to the same college and are in a students' college-based support network? One study, conducted with a sample mostly composed of commuter students, found that students who attend college with a close friend are less likely to form new close friendships during the transition to college (Benson, 2007). The current study builds on these findings by exploring if the relationship with high school friends who matriculate to the same residential college campus uniquely contribute to well-being during the transition. Students who remain close with a high school friend matriculating to the same college as them might be less likely to experience a period of 'friendsickness' and reap the benefits of feeling support from a member of their high school social convoy during the transition to college. At the beginning of the transition to college, having a familiar friend in their college-based support network might fulfill, to a greater degree, certain social support needs than new friends made at college. I hypothesize that having familiar ties in the emerging college-based support network will result in the student reporting greater levels of general belongingness during the transition to college *(Question 1).*

Maintaining peer relationships established prior to entering college while matriculating to the same institution might be beneficial for students, but to what extent does the strength of these familiar ties relate to feelings of belongingness? Tie strength refers to the intensity and persistence of connections between an *ego* (i.e., central individual within a personal network) and an *alter* (i.e., individual who is connected to an ego within a personal network) (Marsden & Campbell, 1984; Perry et al., 2018). In personal network literature, tie strength is typically measured by factors such as the frequency of contact, the length of the relationship, and the emotional closeness between individuals (Perry et al., 2018). Familiar ties might be conceptualized as 'strong' ties during the transition to college, due to the relationships having been established prior to arriving on campus. However, familiar ties likely vary in tie strength (i.e., frequency of contact; feelings of closeness); the strength of the relationship with familiar ties might be what is most crucial. I hypothesize that how frequently students communicate with their familiar ties and how close students feel to their familiar ties will impact their general sense of belonging. In other words, I predict that the strength of student's familiar ties, beyond the mere presence or absence of familiar tie(s) in the network, will impact students' sense of belonging *(Question 2).*

New Ties

The second set of research questions focuses on the presence of 'new ties' (i.e., relationships established after arriving to campus) in a students' peer support network during the transition to college. Prior research has established that forming new relationships as students transition to college is associated with positive outcomes, such as acclimating to their new environment and forming institutional attachment (Buote et al., 2007; Swenson et al., 2008). I hypothesize, for the current study, that students who have new ties in their emerging college-

based support network will report greater levels of school connectedness during the transition to college (*Question 3*).

Assuming that the presence of new ties within the college-based network predicts greater levels of school connectedness, what pre-college experiences might help prepare students to form these new ties? Participation in extracurriculars in high school might contribute to students' preparedness for the social and academic task demands of college life (Lerner, 2015). For example, a student who participates in their high school's yearbook and drama clubs and plays on the high school soccer team is likely building interpersonal skills as well as self-efficacy and confidence in navigating various types of social situations. This concept could apply to students having an easier time 'finding their people' as they transition to college and form new social relationships within contexts they are already comfortable in (e.g., a student who played tennis in high school feeling comfortable and confident joining the intramural tennis team at their new college). For the current study, I hypothesize that students who report having participated in a greater variety of extracurricular activities during high school will have a greater number of new ties in their emerging college-based peer network *(Question 4)*.

Once students form new relationships on campus, their new college-based support network might provide them with a variety of types of support, including emotional (i.e., offering reassurance or comfort in uncertain situations) and instrumental support (i.e., providing information, resources, or opportunities) (Perry et al., 2018). Although 'weak' ties might fulfill fewer emotional supportive functions compared to 'strong' ties, research on social capital emphasizes the importance of having 'weak' ties for obtaining novel information and resources (Portes, 2000). Much like how 'weak' ties provide individuals with novel information, new ties in a college-based peer support network provide unique relationship functions during the

transition to college. Students whose new ties provide instrumental support (i.e., social capital) could serve to better connect them to the greater college community. Therefore, the final research question examines whether the instrumental support obtained from new connections on campus influences students' school connectedness. I hypothesize that the greater amount of instrumental support students acquire from their new ties, the more connected they will feel to their campus community *(Question 5)*.

To identify new and familiar ties and their characteristics, the current study employed a name generator and name interpreter methodology commonly utilized in ego-network research (Perry et al., 2018). Specifically, to elicit the names of the students (i.e., alters) comprising their personal networks on campus, participants (i.e., egos) completed an exchange-based name generator (Burt, 1984) to capture their core discussion network. The core discussion network (i.e., who people discuss important matters with) has been theorized to be composed of an individual's closest ties (Perry et al., 2018). To identify the strength and instrumental supportiveness of each tie, each ego completed a name interpreter. The name interpreter consisted of a series of questions and ratings about each alter identified as belonging to their college-based personal network.

CHAPTER 3

METHOD

Participants

Undergraduate students from the University of Georgia (UGA) were the participants for the current study. UGA is a public, research institution and one of two land-grant universities in the state of Georgia with a typical undergraduate enrollment that exceeds 30,000 students. The majority of undergraduates are in-state students (87% in-state Fall 2021) (Butler-Mayes et al., 2022). The sample included 143 first-year students from the incoming 2021 class where 78% (n = 112) of participants identified as women and 18% (n = 26) identified as men. Although this sample is composed of more women, UGA's gender breakdown for the 2021 incoming class is also skewed and reflects more women than men (64% women, 36% men). In addition, two participants identified as gender queer or gender nonconforming, two participants identified as nonbinary, and one participant preferred not to answer the question prompting gender identity.

In terms of racial/ethnicity background, 68% of participants were White, 20% were Asian or Asian American, 7% were Hispanic or Latinx, 4% were Black or African American, and 1% were Multiracial. Similar to the gender breakdown, this sample composition of different racial/ethnic backgrounds is reflective of UGA's 2021 freshman profile (Graves, 2021). According to the UGA Common Data Set for the Fall of 2021, approximately 67% of degree-seeking enrolled first-year students were White, 14% were Asian, 5% were Black or African American, 6% were Hispanic or Latinx and 4% were Multiracial (University of Georgia, 2022).

Data Collection Procedures

To participate in the study, students must have been 18 years of age or older and considered a first year UGA student. All undergraduate, first-year students are required to live in University Housing during their first year of enrollment. Some students may request and be granted an exemption from this 'First-Year Live-On Requirement' if they meet certain criteria (i.e., student plans to live with parent or guardian within neighboring county; student will be under the age of 17 before the first day of the semester). Participants were recruited through their First Year Odyssey Seminar (FYOS), a course required by all first-year undergraduates at UGA. Each FYOS class contains students from different majors across campus and is capped at 15 students per course. Information surrounding the study was shared with 20 FYOS classes. Researchers either presented the project in person during the beginning of the class and/or shared recruitment materials via email, depending on the instructor's preference. In all, 227 students expressed interest in the study by providing their email address to receive further information. Of those, 149 students submitted a survey.

The University of Georgia's Human Research Protection Program and Institutional Review Board (IRB) approved the current study's recruitment process, data collection measures, and research procedures. All participants self-selected and consented to take part in the study. Active consent to participate in the study was obtained before students competed data collection procedures and measures via UGA Qualtrics, a web-based survey tool. Participants completed the entirety of the survey via Qualtrics at a time that was convenient for their schedules. The survey was estimated to take anywhere between 15 to 25 minutes to complete. As an incentive for their time, participants received a $10 Amazon gift card after they submitted the Qualtrics survey.

Even though the timing of when students completed the survey varied, nearly all participants completed the survey between 4 and 8 weeks of arriving on campus. Participants were prompted to fill out demographic information and complete questionnaires to assess their perceived levels of wellbeing, belongingness, and adjustment as part of a larger study on first year college students' transition to college. It is important to note that data for this study was collected the first academic year following the COVID-19 pandemic (i.e., Fall 2021), which might have influenced how students formed and maintained social ties during the transition to college.

Measures

Pre-College Variables

Before completing measures relating to general sense of belonging and college connectedness, participants were asked to report pre-college variables. Students identified whether they were attending UGA from in-state or out-of-state. Participants also answered several questions surrounding characteristics of their high schools (e.g., "Approximately, how many students were in your senior class?" and "On average, how many students from your high school are beginning their first-year at UGA at the same time as you?") as well as their high school experiences (e.g., "How long did you attend the high school from which you graduated?" and "In what extracurricular activities were you involved in high school?"). Regarding *high school extracurriculars*, participants were asked to select each extracurricular activity they participated in during high school from a list of options. The list of extracurricular activities included athletics, student government, academic societies, theatre, band, choir, community service, ROTC, etc. Participants were permitted to write in an 'other' option if they participated in an extracurricular activity that was not listed.

To capture the variety of extracurricular involvement during high school, a study variable was created based on the framework of reputational crowds outlined by Brown (1999). Each extracurricular activity reported by participants was categorized into one of four domains: *academic, athletic, performing arts*, or *other (see Appendix)*. Participants received a score of 1 for each category in which they reported involvement, resulting in a possible range from 0 (i.e., no extracurricular participation) to 4 (i.e., participation across all four categories). This variable was then labeled *'HS Extracurriculars.'*

General Sense of Belonging

To measure an overall sense of belongingness, participants completed The Social Connectedness and Social Assurances Scales (SCSAS; Lee & Robbins, 1995). The SCSAS is composed of two subscales that assess different components of belonging such as companionship, affiliation, and connectedness. (Lee & Robbins, 1995). For this study, the Social Connectedness subscale of the SCSAS was utilized to measure participants' *general sense of belongingness* – perceptions of emotional distance between the rater and others in their life (e.g., "Even around people I know, I don't feel that I really belong" and "I feel disconnected from the world around me"). The subscale, composed of eight individual items that prompt participants to rate their agreement on a six-point Likert scale (ranging from "Strongly disagree" to "Strongly agree"), demonstrated appropriate internal consistency reliability ($\alpha = .922$) in the current study.

School Connectedness

The College Student Subjective Wellbeing Questionnaire *(*CSSWQ*)* was completed by participants to assess different aspects of their wellbeing in relation to being an undergraduate student (Renshaw & Bolognino, 2014). The CSSWQ is a domain-specific measure of college student's covitality, which is defined as an individual's cumulative subjective wellbeing

involving a combination of emotional, cognitive, social, and behavioral components (Renshaw & Bolognino, 2014). Participants rated their agreement with 16 items on a seven-point Likert-scale, ranging from "Strongly disagree" to "Strongly agree" for this measure. The CSSWQ is composed of four subscales (academic efficacy, college gratitude, school connectedness, and academic satisfaction), each of which is comprised of four items.

For the current study, the *school connectedness* subscale was utilized to measure participants' feelings of connectedness specific to the context of UGA. Items in this subscale include "I feel like a real part of this school," "I can really be myself at this school," and "Other students here like me the way I am." Items were slightly reworded by replacing 'school' with 'UGA.' The *school connectedness* subscale demonstrated adequate internal consistency reliability ($\alpha = .843$) with the current sample.

Identification of Network Members and their Characteristics

To elicit information surrounding students' personal networks (i.e., egonets), participants were instructed to provide the names of their *alters*, or those in their networks (i.e., *name generator*), and then answered questions that assessed contexts, interactions, and demographics of those alters (i.e., *name interpreter*).

Name Generator. First, participants completed a name generator. Participants were asked, "who are the students at UGA with whom you discuss topics or matters you find to be important," (Perry et al., 2018). Participants (i.e., ego) were asked to identify up to 10 students (i.e., alters). Participants identified each alter by writing their first name and last initial. The average network size for participants who named at least one alter ($N = 124$) was 5.23, which is consistent with prior research showing that the important matters name generator typically elicits about 5 to 6 alters (Marin, 2007).

Name Interpreter. After identifying their alters, participants responded to a series of questions about each alter they named. The name interpreter queried participants about where they interact with each alter as well as the nature of the relationship with each alter. First, participants were queried about where they interacted with each alter they named. To assess *interaction contexts* with each alter, participants were asked to select from a provided list of interaction contexts. Multiple interaction contexts could be selected if the participant wished. The list included interaction contexts though classes/academics, residence halls, athletics, student organizations, Greek life, religious organizations, volunteer activities and work study. Participants were also permitted to write in an "other" interaction context if they thought another setting better represented where they interact with the alter. Then, participants provided *demographic* (i.e., racial/ethnic status and gender identity) information about each alter. Background information (i.e., state of residency and current major area of study) was collected on each alter as well.

After reporting on interaction contexts and background information, participants then answered questions relating to the nature of their relationship with each alter. To determine if the alter was a *familiar tie* or a *new tie*, participants were asked whether they knew the alter before matriculating to UGA. If participants indicated that they knew the alter prior to attending UGA, they then were asked where they knew the alter from (e.g., high school). These alters were categorized as '*familiar ties*' in an ego's network. All other alters identified by the name generator, whom the participant did not know prior to their arrival on the UGA campus, were categorized as '*new ties*' in the ego's network.

Next, to assess the strength of the ego-alter tie, participants rated how close they felt to each alter and how frequently they were in contact with each alter. To measure *feelings of*

closeness, participants rated how close they felt to each alter on a six-point Likert scale, ranging from "Not very close" to "Extremely close." Then, participants rated how *frequently* they see or talk with each alter on a six-point Likert scale, ranging from "Once per month" to "More than once per day." This question included a caveat explaining that "talking" might include communication via phone, text or social media. This question measured the frequency of contact with each alter. Next, to gather information about the *instrumental support* provided by each alter within the college context, participants rated each of their alters on an item that reflected social capital exchange. Specifically, participants rated each alter on a five-point Likert scale, ranging from "Never" to "Always," on the whether the alter "provides them with information about resources or opportunities, such as sharing information about class or events happening on campus."

Using this information, three variables were constructed to address study questions: feelings of closeness (familiar tie), frequency of contact (familiar tie), and instrumental support (new tie). The variables were constructed using different samples (i.e., sample of participants who reported at least one familiar tie vs. sample of participants who reported at least one new tie) depending on the focus of each research question. For each participant who reported at least one familiar tie ($N = 93$), I calculated the average *feelings of closeness* and the average *frequency of contact* across all of their familiar ties. These variables were then labeled '*Closeness-Familiar'* and '*Frequency-Familiar'*. Similarly, for each participant who reported at least one new tie ($N = 111$), I calculated the average *instrumental support* across all of their new ties. This variable was labeled '*InstrumentalSupport-New'*. These variables were then used in subsequent analyses to examine the distinct functions of familiar and new ties within participants' emerging support networks.

CHAPTER 4

RESULTS

Descriptive Statistics

All analyses were conducted using IBM SPSS Statistics Software 29.0 (IBM Corp., Armonk, NY). First, descriptive statistics were conducted for all independent and dependent study variables. Results can be found in Table 1. Across the 143 participants, the average number of new ties and average number of familiar ties are reported. The full sample (N =143) was utilized for the Belongingness, School Connectedness and High School Extracurriculars variables as well. Descriptive statistics were calculated for Closeness-Familiar and Frequency-Familiar study variables only for participants who reported at least one familiar tie (N = 93). The Instrumental Support-New variable was calculated only for participants who reported at least one new tie (N = 111). Skew and kurtosis for all variables were found to be within normal limits (Field, 2018).

Table 1
Descriptive Statistics of all Variables

Variables	N	Mean	SD	Min	Max	Skew	Kurtosis
1. Number of Familiar Ties	143	1.42	1.42	0.00	6.00	.084	-0.01
2. Number of New Ties	143	2.87	2.58	0.00	10.00	0.92	0.05
3. Belongingness	141	24.04	4.63	8.00	32.00	-0.66	1.35
4. School Connectedness	141	21.13	4.45	5.00	28.00	-1.17	1.73
5. HS Extracurriculars	143	2.72	0.80	0.00	5.00	-0.37	-0.69
6. Closeness-Familiar	93	5.00	0.75	3.00	6.00	-0.35	-0.62
7. Frequency-Familiar	93	4.54	1.11	1.00	6.00	-0.45	0.02
8. Instrumental Support-New	106	3.80	0.91	1.67	5.00	-.229	-.961

Note: Varying sample sizes due to missing data.

Pearson correlations were conducted among all study variables and are displayed in Table 2. Notably, belongingness and school connectedness were moderately-strongly correlated (r =

.61). Variables that measure different aspects of tie strength with familiar ties (i.e., feelings of closeness and frequency of contact) were significantly positively correlated (r = .31). Those who report to be frequently in contact with their familiar ties also report stronger instrumental support from their new ties (r = .37). Belongingness was significantly correlated with both instrumental support from new ties (r = .29) and closeness with familiar ties (r = .21), but not with frequency of contact with familiar ties. New ties were positively associated with both belongingness (r = .21) and school connectedness (r = .32). Familiar ties showed nonsignificant correlations with all other variables.

Table 2
Pearson Correlation among all Variables

Variables	1	2	3	4	5	6	7	8
1. Number of Familiar Ties	-	.024	.061	.064	.079	-.148	-.194	.056
2. Number of New Ties		-	.210*	.322**	.134	-.003	-.019	-.073
3. Belongingness			-	.612**	.143	.205*	.089	.289**
4. School Connectedness				-	.124	.220*	.212*	.281**
5. HS Extracurriculars					-	.057	-.179	-.060
6. Closeness-Familiar						-	.313*	.203
7. Frequency-Familiar							-	.366**
8. Instrumental Support-New								-

Note. * p <.05. ** p <.01.

Analyses Addressing Study Questions

Research indicates that students' gender identity and racial status can significantly influence their college social experiences (Bowman, 2010). Therefore, descriptive statistics are presented for study variables relevant to each research question separately by gender and racial categories: those pertaining to *familiar ties* (Question 1 and Question 2) and those pertaining to *new ties* (Question 3, Question 4, and Question 5). Descriptive statistics for variables associated with familiar tie research questions (i.e., familiar ties, belongingness, closeness, frequency) are reported in Table 3 and Table 4. Descriptive statistics for variables associated with *new tie*

research questions (i.e., new ties, school connectedness, extracurricular activities, instrumental support) are reported in Table 5 and Table 6.

Table 3
Descriptive Statistics of Familiar Tie Variables by Gender

	Variable	Mean	SD	Min	Max	*n*
Women						
	Number of Familiar Ties	1.44	1.41	0.00	6.00	112
	Belongingness	23.97	4.54	8.00	32.00	111
	Closeness-Familiar	5.02	0.75	3.00	6.00	74
	Frequency-Familiar	4.55	1.17	1.00	6.00	74
Men						
	Number of Familiar Ties	1.38	1.60	0.00	5.00	26
	Belongingness	25.16	3.95	18.00	32.00	25
	Closeness-Familiar	4.93	0.75	4.00	6.00	15
	Frequency-Familiar	4.62	0.87	3.50	6.00	15
Nonbinary						
	Number of Familiar Ties	1.00	1.41	0.00	2.00	2
	Belongingness	21.00	4.24	18.00	24.00	2
	Closeness-Familiar	5.00	--	5.00	5.00	1
	Frequency-Familiar	5.00	--	5.00	5.00	1
Gender Queer						
	Number of Familiar Ties	1.50	0.71	1.00	2.00	2
	Belongingness	18.50	14.84	8.00	29.00	2
	Closeness-Familiar	5.00	1.41	4.00	6.00	2
	Frequency-Familiar	3.50	0.71	3.00	4.00	2
Prefer not to Respond						
	Number of Familiar Ties	1.00	--	1.00	1.00	1
	Belongingness	21.00	--	21.00	21.00	1
	Closeness-Familiar	4.00	--	4.00	4.00	1
	Frequency-Familiar	4.00	--	4.00	4.00	1

Note. (Varying sample size due to missing data)

Table 4
Descriptive Statistics of Familiar Tie Variables by Race

	Variable	Mean	SD	Min	Max	*n*
Asian/Asian American						
	Number of Familiar Ties	1.78	1.49	0.00	5.00	28
	Belongingness	24.18	3.85	15.00	31.00	27
	Closeness-Familiar	4.86	0.72	3.00	6.00	19
	Frequency-Familiar	4.28	0.62	3.33	5.50	19
Black/African American						
	Number of Familiar Ties	1.00	0.89	0.00	2.00	6
	Belongingness	19.66	2.16	17.00	22.00	6

	Closeness-Familiar	4.13	0.63	3.50	5.00	4
	Frequency-Familiar	4.13	1.44	3.00	6.00	4
White						
	Number of Familiar Ties	1.41	1.43	0.00	6.00	97
	Belongingness	24.22	4.94	8.00	32.00	96
	Closeness-Familiar	5.15	0.71	4.00	6.00	65
	Frequency-Familiar	4.64	1.19	1.00	6.00	65
Multiracial						
	Number of Familiar Ties	0.00	0.00	0.00	0.00	2
	Belongingness	24.00	1.41	23.00	25.00	2
	Closeness-Familiar	--	--	--	--	0
	Frequency-Familiar	--	--	--	--	0
Hispanic/Latinx						
	Number of Familiar Ties	1.00	1.24	0.00	3.00	10
	Belongingness	24.50	4.08	18.00	31.00	10
	Closeness-Familiar	4.23	0.62	3.33	5.00	5
	Frequency-Familiar	4.50	1.35	2.33	6.00	5

Note. (Varying sample size due to missing data)

Table 5

Descriptive Statistics of New Tie Variables by Gender

	Variable	Mean	SD	Min	Max	*n*
Women						
	Number of New Ties	3.06	2.67	0.00	10.00	112
	School Connectedness	21.19	4.48	5.00	28.00	111
	HS Extracurriculars	2.75	0.78	0.00	4.00	112
	Instrumental Support-New	3.83	0.89	2.00	5.00	87
Men						
	Number of New Ties	2.15	2.52	0.00	10.00	26
	School Connectedness	21.48	3.44	13.00	29.00	25
	HS Extracurriculars	2.65	0.84	1.00	5.00	26
	Instrumental Support-New	3.87	0.94	1.67	5.00	15
Nonbinary						
	Number of New Ties	0.50	0.71	0.00	1.00	2
	School Connectedness	19.50	3.53	17.00	22.00	2
	HS Extracurriculars	1.50	0.71	1.00	2.00	2
	Instrumental Support-New	2.00	--	2.00	2.00	1
Gender Queer						
	Number of New Ties	4.50	4.94	1.00	8.00	2
	School Connectedness	16.00	14.14	6.00	26.00	2
	HS Extracurriculars	3.00	0.00	3.00	3.00	2
	Instrumental Support-New	2.69	0.44	2.38	3.00	2
Prefer not to Respond						
	Number of New Ties	1.00	--	1.00	1.00	1
	School Connectedness	18.00	--	18.00	18.00	1

	HS Extracurriculars	3.00	--	3.00	3.00	1
	Instrumental Support-New	4.00	--	4.00	4.00	1

Note. (Varying sample size due to missing data)

Table 6
Descriptive Statistics of New Tie Variables by Race

	Variable	Mean	SD	Min	Max	*n*
Asian/Asian American						
	Number of New Ties	2.04	2.32	0.00	7.00	28
	School Connectedness	21.18	4.81	5.00	27.00	27
	HS Extracurriculars	2.68	0.94	0.00	5.00	28
	Instrumental Support-New	3.85	1.05	2.00	5.00	16
Black/African American						
	Number of New Ties	2.00	2.53	0.00	6.00	6
	School Connectedness	16.00	4.73	9.00	23.00	6
	HS Extracurriculars	2.83	0.98	2.00	4.00	6
	Instrumental Support-New	3.33	1.53	2.00	5.00	3
White						
	Number of New Ties	3.36	2.78	0.00	10.00	97
	School Connectedness	21.63	4.13	6.00	28.00	96
	HS Extracurriculars	2.76	0.76	1.00	4.00	97
	Instrumental Support-New	3.78	0.86	1.67	5.00	80
Multiracial						
	Number of New Ties	0.00	0.00	0.00	0.00	2
	School Connectedness	20.00	8.48	14.00	26.00	2
	HS Extracurriculars	2.50	0.71	2.00	3.00	2
	Instrumental Support-New	--	--	--	--	0
Hispanic/Latinx						
	Number of New Ties	1.50	1.27	0.00	3.00	10
	School Connectedness	19.40	4.14	12.00	25.00	10
	HS Extracurriculars	2.40	0.69	1.00	3.00	10
	Instrumental Support-New	4.05	1.04	2.00	5.00	7

Note. (Varying sample size due to missing data)

Analyses Addressing Main Study Questions

Gender and race were included as covariates in the multiple regression models used to examine research questions. To avoid centralizing one specific racial group or gender identity, effect coding was employed. All other independent variables were then mean centered in the multiple regression models. Gender was effect coded as a -1/1 variable (1 = women). Due to

sample size constraints, regression models excluded five participants who did not identify as women or men (two nonbinary, two queer, and one prefer not to respond). The moderating effect of gender was explored in all analyses.

Relation between Familiar Ties and General Belongingness (*Question 1)*

The first two research questions involved *familiar ties* (i.e., relationships that participants established prior to arriving on campus) and general sense of belonging. Before running regression analyses, I conducted a t-test to determine if there was a significant difference in general belongingness between those participants that nominated at least 1 familiar tie ($N = 93$) and those who nominated no familiar ties ($N = 48$). The result is reported in Table 7. There was no significant difference in belonging between these two groups of participants.

Table 7
T-Test by Nomination of Familiar Tie

	Nominated at least 1 Familiar Tie		Nominated 0 Familiar Ties		*t*	*p*	Cohen's *d*
	M	*SD*	*M*	*SD*			
Belongingness	24.18	4.65	23.77	4.62	-0.499	.618	-0.089

Note. $df = 139$

Next, I conducted a multiple regression analysis to examine if the number of familiar ties in a student's network predicts belongingness, after accounting for gender and race. Results can be found in Table 8. The overall regression model predicting belongingness [$F(7,128) = 1.347$, $p = .234$] was not significant. The number of familiar ties did not significantly predict belongingness. In terms of race, Black students reported significantly lower belongingness ($p = .034$). Differences between Asian, White, Hispanic and Multicultural students were not statistically significant. The explored interaction between gender and number of familiar ties was found to be not significant.

Table 8

Multiple Regression Analysis for Belongingness: Number of Familiar Ties, Gender and Race (N = 136)

Effect	B	SE B	95% CI for B		p	R^2 ($R^2_{Adjusted}$)
			LL	UL		
Belongingness					.234	.069(.018)
Race (White = 1)	.929	.884	-.824	2.676	.297	
Race (Asian = 1)	.599	1.066	-1.510	2.708	.575	
Race (Black = 1)	-3.488	1.627	-6.707	-.268	.034	
Race (Hispanic = 1)	1.751	1.393	-1.004	4.507	.211	
Race (Multiracial = 1)	.211	2.584	-4.903	5.325	.935	
Gender (Women = 1)	-.394	.502	-1.387	.598	.434	
Familiar Ties	-.002	.323	-.641	.636	.994	
Familiar Ties X Gender	.323	.318	-.306	.953	.312	

Note. (Race and Gender variables were effect coded for these models and all other variables were mean centered)

Relation between Strength of Familiar Ties and General Belongingness (*Question 2*)

The second research question concerning familiar ties examined the strength of familiar ties. The two variables that measured tie strength for these analyses were *frequency of contact with familiar ties* and *feelings of closeness with familiar ties*. A multiple regression analysis was conducted to examine whether frequency of contact and feelings of closeness with familiar ties predicts general belongingness, while controlling for gender and race. Results of the analysis can be found in Table 9. Due to sample size constraints, participants who identified as Multiracial were excluded from this analysis. Interaction terms between frequency of contact and gender, as well as closeness and gender, were also included. The overall regression model predicting belongingness [$F(8,80) = 1.669$, $p = .119$] was not significant.

Despite the non-significant overall model, several individual predictors were statistically significant. Feelings of closeness with familiar ties were significantly associated with belongingness *(p = .040)*. A significant interaction was also observed between closeness and gender *(p = .037)*. Participants identifying as Black reported significantly lower levels of

belongingness compared to the overall mean. No other main effects or interaction terms were statistically significant.

Table 9

Multiple Regression Analysis for Belongingness: Frequency of Contact, Feelings of Closeness, Gender and Race (N = 89)

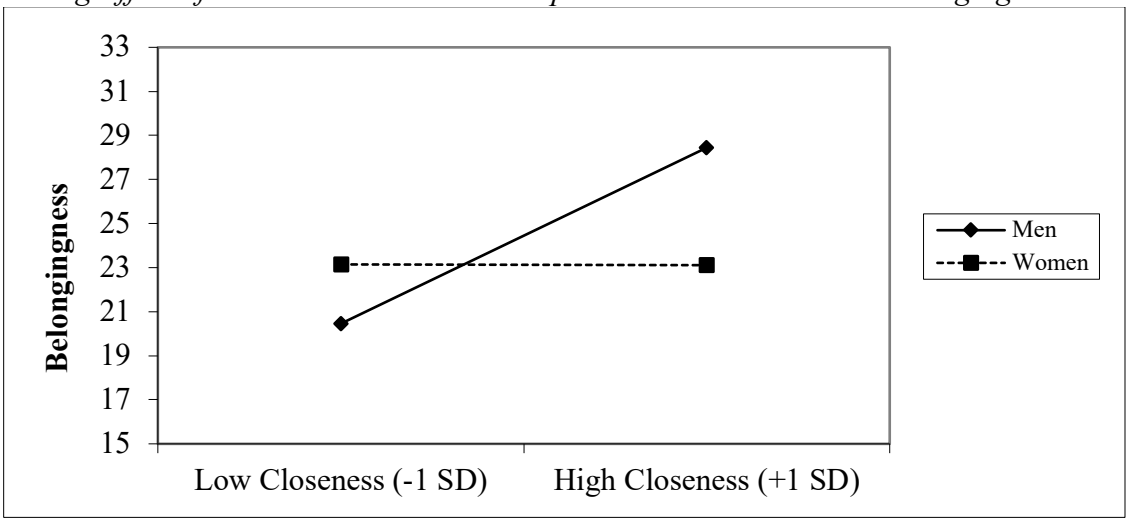
Effect	B	SE B	95% CI for B		*p*	R^2 ($R^2_{Adjusted}$)
			LL	UL		
Belongingness					.119	.143(.057)
Race (White = 1)	1.450	.955	-.450	3.351	.133	
Race (Asian = 1)	.714	1.089	-1.453	-.883	.514	
Race (Black = 1)	-4.354	1.744	-7.825	5.327	.015	
Race (Hispanic = 1)	2.189	1.577	-.948	.584	.169	
Gender (Women = 1)	-.661	.626	-1.907	.584	.294	
Frequency	-1.054	.793	-2.632	.524	.188	
Frequency X Gender	1.148	.787	-.418	2.713	.148	
Closeness	1.989	.952	.094	3.885	.040	
Closeness X Gender	-2.006	.945	-3.888	-.125	.037	

Note. (Race and Gender variables were effect coded for these models and all other variables were mean centered)

To further explore the moderating effect of gender on the relationship between closeness and belonging, an interaction plot was generated (Figure 1; Dawson, 2025). An examination of the slopes indicates a positive association between feelings of closeness with familiar ties and belongingness for men (p=.004) but not for women (p=.990). That is, men report a greater sense of belongingness when they have close, familiar ties, but women in the sample did not.

Figure 1

Moderating Effect of Gender on the Relationship between Closeness and Belongingness



Relation between New Ties and School Connectedness (*Question 3*)

The final three research questions examined the relation between new ties (i.e., relationships that participants established after arriving on campus) and school connectedness. Before running regression analyses, I conducted a t-test to determine if there was a significant difference in school connectedness between those participants who nominated at least 1 new tie ($N = 111$) and those who nominated no new ties ($N = 30$). The results of the t-test are reported below in Table 10. The Levene's test for equality of variances was significant, *(*$p = .029$), indicating a violation of the assumption of equal variances. Therefore, degrees of freedom were adjusted. There was a statistically significant difference in school connectedness between students who nominated no new ties and those who nominated at least one new tie. The effect size was moderate.

Table 10

T-Test by Nomination of New Tie

	Nominated at least 1 New Tie		Nominated 0 New Ties		*t*	*p*	Cohen's *d*
	M	*SD*	*M*	*SD*			
School Connectedness	21.604	4.05	19.367	5.44	-2.102	.042	-.512

Note. $df = 33.043$

I conducted a multiple regression analysis to examine if the number of new ties in a student's network predicts school connectedness, after accounting for gender and race. Results can be found in Table 11. The overall regression model predicting school connectedness [$F(7, 128) = 3.723$, $p < .001$] was statistically significant. The number of new ties significantly predicted school connectedness ($p = .001$), with higher numbers of new ties associated with greater school connectedness. Race was a significant predictor for Black participants, who reported significantly lower levels of school connectedness compared to the overall mean ($p =$

.011). No other race or gender variables were significant predictors. The explored interaction between gender and number of new ties was not significant.

Table 11
Multiple Regression Analysis for School Connectedness: Number of New Ties, Gender and Race (N = 136)

Effect	B	SE B	95% CI for B		*p*	R^2 ($R^2_{Adjusted}$)
			LL	UL		
School Connectedness					.001	.169(.124)
Race (White = 1)	1.284	.832	-.362	2.931	.125	
Race (Asian = 1)	1.334	.956	-.558	3.226	.165	
Race (Black = 1)	-3.851	1.486	-6.791	-.910	.011	
Race (Hispanic = 1)	-.017	1.273	-2.536	2.502	.989	
Race (Multiracial = 1)	1.249	2.355	-3.411	5.909	.597	
Gender (Women = 1)	-.318	.460	-1.229	.594	.492	
New Ties	.609	.185	.243	.975	.001	
New Ties X Gender	-.230	.180	-.585	.126	.204	

Note. (Race and Gender variables were effect coded for these models and all other variables were mean centered)

Relation between Extracurricular Activities and Number of New Ties (Question 4)

To explore whether participation in a variety of extracurricular activities in high school leads to the formation of more new ties, a multiple regression analysis was conducted with the number of new ties as the dependent variable, with gender and race as covariates. Results are found in Table 12. The overall regression model was significant, [F(7, 130) = 2.559, p = .017]. Regarding the predictors, the number of extracurricular activities was not a significant predictor of the number of new ties. Participants identifying as White reported significantly more new ties compared to the overall mean (p = .003). No other racial groups showed significant differences in the number of new ties. Gender was not a significant predictor in the model. An interaction between gender and high school extracurriculars was explored but not found to be significant.

Table 12
Multiple Regression Analysis for Number of New Ties: High School Extracurricular Activities, Gender and Race (N = 138)

Effect	B	SE B	95% CI for B		*p*	R^2 ($R^2_{Adjusted}$)
			LL	UL		
Number of New Ties					.017	.121(.074)
Race (White = 1)	1.566	.512	.552	2.579	.003	
Race (Asian = 1)	.469	.612	-.741	1.680	.444	
Race (Black = 1)	.022	.946	-1.849	1.893	.981	
Race (Hispanic = 1)	-.265	.811	-1.869	1.340	.745	
Race (Multiracial = 1)	-1.792	1.497	-4.754	1.169	.233	
Gender (Women = 1)	.420	.283	-.140	.979	.140	
HS Extracurriculars	-.016	.344	-.697	.664	.962	
HS Extracurriculars X Gender	.595	.346	-.090	1.279	.088	

Note. (Race and Gender variables were effect coded for these models and all other variables were mean centered)

Relation between Instrumental Support and School Connectedness (*Question 5*)

The final research question examines the degree to which new ties are instrumentally supportive during the transition to college. A multiple regression analysis was conducted to examine whether instrumental support from new ties predicts school connectedness, while controlling for gender and race. Results can be found in Table 13. The Multiracial group was excluded from the regression due to insufficient sample size. The overall model was statistically significant [F(6,95) = 2.210, p = .049]. Instrumental support from new ties was a significant positive predictor of school connectedness (p = .042). No control variables significantly predicted school connectedness. The explored interaction between gender and instrumental support was not significant.

Table 13
Multiple Regression Analysis for School Connectedness: Instrumental Support, Gender and Race (N = 102)

Effect	B	SE B	95% CI for B		*p*	R^2 ($R^2_{Adjusted}$)
			LL	UL		
School Connectedness					.049	.122(.067)
Race (White = 1)	.985	.762	-.527	2.497	.199	
Race (Asian = 1)	1.206	.957	-.694	3.106	.211	

Race (Black = 1)	-.829	1.678	-4.159	2.502	.622
Race (Hispanic = 1)	-1.362	1.294	-3.932	1.207	.295
Gender (Women = 1)	-.693	.518	-1.721	.336	.185
Instrumental Support	1.186	.574	.046	2.327	.042
Instrumental Support X Gender	.064	.569	-1.067	1.194	.911

Note. (Race and Gender variables were effect coded for these models and all other variables were mean centered)

CHAPTER 5

DISCUSSION

The transition to college marks a critical period of change in which students must navigate a new environment while simultaneously building their college-based support network. Prior research has highlighted the importance of forming new social connections during this time as they are key predictors of adjustment to college and social well-being (Buote et al. 2007; Tinto, 1994). However, less is known about familiar ties, those pre-existing relationships that persist into college, and their impact on social-emotional well-being during the transition to college. The current study examined the roles of both familiar and new ties in students' personal networks during the transition to college, with particular focus on how these relationships contribute to a general sense of belonging and connection to the campus community. Additionally, the study considered how closeness and frequency of contact with familiar ties as well as the instrumental supportiveness of new ties impact these relationships. By examining both the quality and function of social ties rather than simply the presence of them in a student's personal network, this study provides a nuanced understanding of how students' personal networks evolve and support their transition to college. Finally, this study examined whether involvement in a variety of extracurricular activities during high school predicts the formation of new ties during the early stages of the transition to college.

The first set of research questions focused on the contribution of familiar ties (i.e., relationships established prior to college) to students' general sense of belongingness during the transition to college. These questions were grounded in Transition Theory (Schlossberg, 2008),

which emphasizes the importance of support systems while navigating life changes. During the shift from home to campus, students often experience disruptions in roles, routines and relationships (Chickering & Schlossberg, 2002; Killiam & Degges-White, 2017). In the midst of these changes, familiar faces from high school (i.e., peers matriculating to the same college) might serve as a stabilizing constant. For students entering large state universities with peers from their hometowns or high schools, these existing ties might ease the initial social transition.

However, contrary to the original hypothesis, the mere presence of familiar ties in a student's peer network did not significantly predict feelings of belongingness. Instead, results revealed that perceived closeness to familiar ties was a significant predictor of belonging, indicating that the *quality* of familiar relationships is important during the transition to college. Specifically, closeness was positively associated with belongingness for men, but this relationship was not significant for women. Frequency of contact with familiar ties in a students' peer network did not significantly predict belongingness. These results suggest that engaging in frequent conversations or interactions with peers from high school is not a critical factor during the college transition; rather, for men in particular, attending university with peers to whom they feel close to enhances a sense of belonging. This aligns with prior research indicating that having at least one close tie, or someone an individual feels comfortable confiding in if they need to, is associated with greater social well-being (Cohen & Wills, 1985).

The second set of research questions examined the influence of new ties (i.e., relationships formed after arriving on campus) on students' feelings of connection to the university. Findings support the hypothesis that the number of new ties students make during the transition to college significantly predicts school connectedness, which is consistent with prior research demonstrating that building new peer relationships during the transition to college

contributes to students' connection to the campus community (Buote et al., 2007; Swenson et al., 2008). School connectedness, or students' perceived membership and sense of fitting into the college environment (Civitci, 2015; Pittman & Richmond, 2007), closely overlaps with the concept of campus-community belonging (Nunn, 2021). Campus-community belonging extends from the broader institutional community and reflects the extent to which students feel welcome and "at home" on campus. These results highlight the importance of developing new relationships early in the college transition as it contributes to feelings of connectedness at the institution level. Importantly, the present findings suggest that students' sense of connectedness to their new college environment is not solely shaped by institutional structures or programming, although such programming might provide opportunities to form new ties. The formation of new peer relationships early in the transition process plays an important role in helping students feel like they belong within their college community. Although colleges and universities might strive to foster inclusive and welcoming environments, it is through the development of new relationships that students come to feel truly connected to their school community.

Given that the formation of new ties is important, the current study also examined whether instrumental support provided by new ties influenced students' connectedness to the campus community. As hypothesized, higher levels of instrumental support from new peer relationships predicted greater school connectedness. This finding emphasizes the critical role that instrumental support, such as providing information, resources or access to new opportunities, plays in fostering students' transition into their new college environment. Instrumental support is a key element of social capital, which refers to the resources from network members that can be exchanged through the maintenance of network relationships (Bourdieu, 2018; Perry et al., 2018). Although instrumental forms of support might come from

both strong and weak ties, weak ties are uniquely positioned to offer novel information and access to resources due to their exposure to different social groups and experiences (Portes, 2000; Small, 2013). In the context of the college transition, even relationships that are relatively new might serve as valuable sources of assistance as students navigate unfamiliar systems and expectations. Future research might explore how perceived closeness in newly formed college relationships influences both instrumental support and school connectedness.

Finally, the study examined whether pre-college extracurricular involvement predicted the number of new ties students reported in their emerging college-based network. Although the overall model predicting number of new ties was significant, the number of extracurricular activities participated in during high school was not a significant predictor. This finding contrasts with the hypothesis that participation in a greater variety of extracurricular activities prior to college equips students with the social skills necessary to form new ties. Although such experiences might support interpersonal skill development and self-efficacy (Lerner, 2015), the data suggest that the social competencies acquired through extracurriculars might not directly translate into a greater number of newly formed ties in the early weeks of college. One possible explanation might be that activity variety does not capture the complexity of student engagement or social motivation. At large, selective institutions, extracurricular involvement is evaluated as an important element within a holistic admissions framework, reflecting a student's potential contributions beyond academics (Coleman & Keith, 2018). However, such records might reflect competitive, resume-building rather than meaningful social participation. Factors beyond pre-college involvement might play a greater role in *how* new ties are formed. Although extracurricular participation in high school might help lay a social foundation, the capacity to

develop new peer relationships on campus might depend more heavily on how students respond to the novel social landscape of college.

With regard to sociodemographic characteristics, a consistent finding across analyses was that Black students reported significantly lower levels of belongingness and school connectedness. Although these findings were not a central focus of the study and should be interpreted with some caution given the relatively small number of Black students in the sample, it is important to note that the proportion of Black students in our sample closely reflects the actual racial breakdown of the institution where this study was conducted. This alignment suggests that the findings are representative of the student population at this institution but might not generalize to contexts with higher proportions of Black students. Notably, the current study was conducted at a predominantly white institution (PWI), a context that might pose unique challenges for students of color (Harper & Hurtado, 2007). The broader findings of this study emphasize the importance of peer relationships in fostering school connectedness, yet, at PWIs, Black students might face social barriers that hinder the development of such relationships. These barriers might include feelings of marginalization, underrepresentation in both student and faculty populations, and experiences of racial microaggressions (Solorzano et al., 2000). The lower levels of belonging and connectedness reported by Black students might reflect not a lack of desire to connect, but a campus climate that makes it more difficult to build the kinds of supportive peer networks that are foundational to a successful college transition. The findings highlight the need for institutions, particularly PWIs, to be proactive in creating inclusive environments where all students have the opportunity to build meaningful relationships and a sense of connection to the broader campus community.

Strengths, Limitations and Implications for Practice

One limitation of the study was the small sample size and, thus, the inability to draw more definitive conclusions about students' experiences related to race as well as differences between in-state and out-of-state students. The distinction between in-state and out-of-state students was of initial interest given the potential influence of geographic origin on students' social transition to college, specifically at a public, land-grant university where the majority of undergraduates are in-state students (87% in-state Fall 2021). At large state universities, in-state students are more likely to matriculate alongside peers from their high school or local area, potentially arriving on campus with established social connections. In contrast, out-of-state students often face the challenge of constructing their peer networks from the ground up, which might place them at greater risk for social isolation or lower levels of belonging during the initial adjustment period. Unfortunately, the sample size in this study did not include a sufficient number of out-of-state students to meaningfully explore this comparison. As a result, the potential moderating role of geographic origin in shaping peer network development and campus connectedness remains an open question. Future research with larger, more geographically diverse samples would allow for a more robust analysis of these dynamics and offer valuable insight into how institutional supports can be tailored to meet the needs of both in-state and out-of-state students. Additionally, because data were collected during the first academic year following the COVID-19 pandemic, students' peer network development and social experiences may have been influenced by lingering disruptions to campus life and routines. This context should be considered when interpreting the generalizability of findings to other cohorts.

Despite these limitations, the use of ego-centric network (ego-net) methodology was a significant strength of this study. The combined use of the name generators and name

interpreters allowed for a more detailed understanding of students' peer networks beyond basic counts of relationships or general questionnaires. For example, the study found that the presence of familiar ties did not significantly predict belonging. Instead, perceived closeness to those familiar ties, as captured through the name interpreter questions, significantly predicted feelings of belonging. This highlights the importance of relationship quality and demonstrates how the ego-net method can uncover relational nuances that generalized social support measures might overlook. The ego-net method also allowed for the differentiation between familiar and new ties. By labeling each alter as 'familiar' or 'new,' the analysis was able to demonstrate that the number of new ties significantly predicted students' sense of school connectedness. This finding supports previous research on the importance of forming new peer relationships during the college transition and demonstrates the value of the ego-centric approach in capturing the structural and functional aspects of students' social networks.

The findings of the current study offer several important implications for those who support students during the transition to college. First, while familiar ties did not universally enhance students' sense of belonging, the perceived *quality* of these relationships (i.e., perceived closeness) proved to be a key factor for men. This suggests that transition programming should emphasize the importance of maintaining a few meaningful pre-college relationships rather than simply staying in frequent contact with many familiar peers. Staying closely connected with familiar peers may serve as a protective factor, particularly during the early weeks of college when feelings of loneliness are common (Oswald & Clark, 2003; Paul & Brier, 2001). Encouraging students to identify and reflect on which of their pre-existing relationships provide emotional support may help them sustain a general sense of belonging from their prior support network during the transition to college. As students begin to build and find new communities in

college, having a close, familiar face from their home community can offer comfort, reassurance and support during this period.

Second, the findings reinforce the value of developing *new peer connections* as a central contributor to students' sense of school connectedness. This study affirms that student affairs professionals, including residential life staff, orientation staff, and university faculty, have been right to prioritize early opportunities for peer interaction (Swenson, 2008). Well-being models adopted by large, public institutions (University of Georgia, n.d.; University of Michigan, 2025) emphasize the importance of students fostering social connections with others while matriculating through college. The emphasis of students' social interaction in these well-being models aligns with the of current study's findings, which demonstrate that fostering new social connections during the transition to college enhances students' sense of connectedness within their campus community. Taken together, supporting both the development of new ties as well as the maintenance of close, familiar ones might offer students a social safety net, allowing them to explore and build new connections while also benefiting from the emotional security of familiar relationships.

In addition to emotional support, the study also highlights the importance of instrumental support, such as sharing resources or guidance, as a key factor in fostering students' sense of connection to the university. New relationships that offer *instrumental support* were especially impactful for fostering connectedness in the current study. This underscores the importance of training peer mentors, advisors, and support staff to not only offer emotional support but also to proactively connect students with concrete tools and information that aid in navigating college life. Many universities implement structured peer education or peer mentoring programs for exactly this reason, as peer educators are often trusted sources of both information and

encouragement and can help bridge gaps between students and institutional resources (National Association of Student Personnel Administrators, 2023; Terrion & Leonard, 2007). Universities can further strengthen these efforts by investing in programs that train not only staff but also students to become knowledgeable ambassadors for campus well-being resources, helping to ensure that information flows through both formal and informal support networks.

In sum, the findings from this study highlight the ways in which both new and familiar relationships shape students' social transitions into college. Although new connections play a vital role in cultivating a sense of school connectedness and access to informational resources, strong (close) familiar ties offer a unique source of support during a period marked by uncertainty. These results reflect the phrase, "Make new friends, but keep the old," by illustrating that successful college adjustment might not stem from choosing between old and new relationships, but rather from understanding that both types of ties play a distinct role. As institutions work to foster inclusive and connected communities, attention to the evolving structure and function of students' peer networks, both enduring relationships carried into college and newly formed connections, will be essential to promoting belonging, school connectedness and well-being throughout the college experience.

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APPENDIX A

Extracurricular Activity Groupings

Academics

1. Student Government
2. Speech/Debate
3. Academic Society (e.g., National Honor Society)

Athletics

1. Athletics (JV/Varsity)
2. Athletics (Club)

Performing Arts

1. Theatre
2. Band
3. Choir
4. Dance

Other

1. Community Service/Volunteer Club
2. Foreign Language Club
3. Yearbook
4. ROTC
5. Career-oriented club/organization
6. Journalism/School Newspaper
7. Other

Social Connectedness and Social Assurances Scales (SCSAS)

"Here are some questions about your social experience. Read each sentence and choose the one response that best describes how you've felt in the past month."

Social Connectedness

1. I feel disconnected from the world around me.
2. Even around people I know, I don't feel that I really belong.
3. I feel so distant from people.
4. I have no sense of togetherness with my peers.
5. I don't feel related to anyone.

6. I catch myself losing all sense of connectedness with society.
7. Even among my friends, there is no sense of brotherhood/sisterhood.
8. I don't feel I participate with anyone or any group.

College Student Subjective Wellbeing Questionnaire (CSSWQ)

"Here are some questions about your college experience. Read each sentence and choose the one response that best describes how you've felt in the past month."

School Connectedness

1. I feel like a real part of this school.
2. People at this school are friendly to me.
3. I can really be myself at this school.
4. Other students here like me the way I am.

Instrumental Support

To what extent does {alter}…

- Provide information, resources, or opportunities (e.g., things happening on campus, job opportunities, information about class).