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UNIVERSITY OF CALIFORNIA
SANTA CRUZ

**The Roles of College Organization Support, Navigational Capital, and Academic
Self-Efficacy in LFGCS' Perceived Persistence to Graduation**

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

DOCTOR OF PHILOSOPHY

in

PSYCHOLOGY

by

Andrew G. Takimoto

September 2024

The Dissertation of Andrew Takimoto is
approved:

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Abstract

The Roles of College Organization Support, Navigational Capital, and Academic Self-Efficacy in LFGCS' Perceived Persistence to Graduation

By Andrew G. Takimoto

As more Latinx First Generation College Students (LFGCS) attend college, they can face a cultural, academic, and social university context that focuses on individuality and competitiveness that may differ from their own cultural values of communality and cooperation. In this dissertation, I used Community Cultural Wealth and Latinx Critical Race theories to address the experiences of LFGCS in college. In a survey of 110 LFGCS, I investigated if college organization support predicted their perceived persistence in college through the sequential mediation of navigational capital and academic self-efficacy. As predicted, the relationship between college organization support and perceived persistence in college was significantly and sequentially mediated by navigational capital and academic self-efficacy. These findings contribute to the literature by showing how participation in college organizations helps LFGCS' develop navigational capital and academic self-efficacy and promotes their confidence in persisting to graduation. Further, the results also underscore how focusing on LFCGS' strengths challenges the deficit perspective that has often been applied to Latinx students in higher education.

Keywords: Latinx first generation college students, community cultural wealth, college organizations, navigational capital academic self-efficacy, persistence in college

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The Roles of College Organization Support, Navigational Capital, and Academic Self-Efficacy in LFGCS' Perceived Persistence to Graduation

The transition from adolescence into emerging adulthood is a period of social, relational, emotional, and cognitive development. During this transition, most college-going emerging adults find they must adapt to a heavier workload compared to high school. For first-generation college students (FGCS), this transition may be especially difficult. FGCS are the first generation in their immediate family to attend a 4-year university and thus, may have less college knowledge and academic preparation than continuing education students (CGS), those for whom at least one parent completed a four-year university degree in the U.S. For Latinx First Generation College Students (LFGCS), this difficulty is amplified as college places them in a context that can be culturally and socially different from their communities and can make them feel uncertain about belonging at their institution (Azmitia et al., 2018; Covarrubias et al., 2019; Oyserman & Lewis, 2017; Stephens et al., 2012).

For LFGCS who leave their home to go away to college, the distance from their family, friends, and home communities can make this transition even more difficult. Research has shown that having a strong social support system helps students adjust to college. However, while their family and home community friends may be important sources of social support, their lack of college knowledge may make it more challenging for them to adjust than their continuing generation peers (Azmitia et al., 2013; Benner et al, 2016). As a result, LFGCS may seek information from college organizations that focus on the Latinx and FGCS experiences to better

manage these stressors and peers and mentors that can offer support and guidance. These college organizations may help them build their navigational capital, which refers to how one must maneuver through different social institutions, such as the ones they encounter in college, and in turn, benefit their academic skills to succeed in their college courses

In this dissertation, I investigated two issues: (1) the roles of college organization support in navigational capital and LFGCS' academic self-efficacy, and (2) the roles of LFGCS college organization support, navigational capital, and academic self-efficacy on their perceived persistence in college. I hypothesized that college organization support would predict LFGFGS' perceived persistence in college through the sequential mediation of navigational capital and academic self-efficacy.

My conceptual framework incorporates critical race theory (CRT) to analyze and challenge the deficit views of LFGCS and other racially minoritized students in higher education (Azmitia et al., 2023; Stephens et al., 2012). My framework is also informed by Yosso's (2005) Community Cultural Wealth theory (CCW) which posits that minoritized students bring multiple forms of capital to higher education that are not recognized in Primarily White Institutions (PWIs). By integrating these theories into my conceptual framework and research, I aimed to provide a more nuanced understanding of LFGCS' college pathways and well-being from a strengths-based perspective that challenges the deficit perspective of minoritized students in psychological research (cf. Azmitia, 2021; Leo & Wilcox, 2023).

Conceptual Framework

Critical Race Theory

Critical Race Theory (CRT), which draws from and extends work on critical theory in law, history, ethnic studies, sociology, and women's studies, was shaped by the unresolved issues and slow gains of the civil rights movement. CRT arose as a criticism of the critical legal studies (CLS) movement in the late 1980's (Ladson-Billings & Tate, 1995). It highlights the role of the legal system in legitimizing oppressive social structures in the US because of its failure to incorporate race and racism into its policies and practices for changing institutions (Azmitia et al., 2023; Delgado 1995; Ladson-Billings, 1998), including higher education.

As CRT evolved throughout the years, it has been extended to incorporate the racialized experiences of Asian-, Latinx-, and Native-Americans, including Asian critical race theory (AsianCrit), Latinx critical race theory (LatCrit), and Native American critical race theory (TribalCrit) along with incorporating other intersecting identities such as gender, e.g., FemCrit (Yosso, 2005). When looking specifically at LatCrit, this theory aims to better incorporate the racialized experiences of subordination and colonization that Latinx people face in the US (Azmitia et al., 2023). The theory explores how oppression, including racism, classism, and sexism, can be shaped by different but often intersecting layers of subordination. These can include Latinx people's immigration status, culture, and language, visible phenotypes, and even their accent and surnames, which create unique experiences relative to those of other people of color (POC) in the US (Azmitia et al., 2023; Guajardo et al., 2020;

Montoya, 1994).

Further expanding CRT by focusing on Chicanx students, Solórzano (1998) centered CRT within the education system proposing five tenets for shaping theory, research, and pedagogy, including (1) the intercentricity of race and racism, or how race and racism are a core part of how one explains how U.S. society functions; (2) challenging dominating ideology, or how CRT challenges White privilege and the idea that institutions such as the education system are an objective and equal opportunity space for all people; (3) a commitment to social justice and how CRT presents a transformative response to oppression; (4) the centrality of knowledge, or the recognition of lived experiences and knowledge of POCs as legitimate and crucial to understanding and informing others about racial subordination and structures; and (5) The transdisciplinary perspective, which incorporates the knowledge of other disciplines such as ethnic studies, psychology, law, women's studies, and other social sciences to analyze race and racism. With these tenets in mind, Yosso (2005) used CRT to better center people of color's (POC's) experiences within educational institutions, including the college system, to challenge the deficit thinking that permeates education and build on POC's strengths. In my dissertation, I aimed to show that by joining college organizations, LFGCS can feel safe, cultivate a sense of belonging, and find academic and emotional support because they can freely express themselves and seek guidance for navigating the college setting.

The Community Cultural Wealth Model

The Community Cultural Wealth model (CCW) proposes a network of

knowledge, skills, abilities, and relationships, such as family, peers, and teachers, utilized by communities of color to navigate and survive the macro and micro-forms of oppression in societal institutions (Yosso, 2005). The CCW perspective is a critique of Bourdieu and Passeron's (1977) cultural capital model on the reproduction of social inequalities in education and more broadly, society. While Bourdieu and Passeron's work was initially focused on social class, it was subsequently extended to racial minorities, immigrants, and other oppressed groups (Tzanakis, 2013). These extensions illuminated how the social networks and knowledge of majority groups afford them academic competencies and success. Bourdieu (1977) proposed that besides social capital, cultural capital, which includes the accumulation of cultural knowledge that can be expressed as skills, values, and knowledge that privileged groups transmit across generations, may also be key sources of social reproduction (Yosso, 2005).

In Yosso's (2005) critique, she argued that Whiteness is used as the standard cultural norm, value, and practice. This leads to others, such as ethno-racial minoritized students, being viewed through a deficit lens when compared to White students, leaving minoritized students' strengths unrecognized. Further, these ethno-racial minoritized students can be encouraged or even pressured to assimilate to the cultural norms they are being compared to, such as embracing competitiveness and individuality (Yosso, 2005; Stephens et al., 2012). These deficit models and pressures are evident in schools and universities that privilege White, middle-class norms (see Stephens et al., 2012). With this critique in mind, the CCW model shifts

the focus from White middle-class cultures to centering on the cultures of communities of color within the U.S. educational system (Yosso, 2005) and other nations (Doyle, 2022). The CCW model also shifts the emphasis on the reproduction of social class across generations to focus on minoritized families and students' agency in social mobility. In this dissertation, I viewed participating in college organizations as an example of LFGCS' agency in their educational pathways.

According to Yosso (2005), community cultural wealth has six components: aspirational capital, linguistic capital, familial capital, social capital, navigational capital, and resistance capital. While these forms of capital are all intertwined, in this dissertation I focused on social capital—as evidenced by participating in college organizations—and navigational capital as resources that allow Latinx FGCS to succeed in college and thrive psychologically. I focused on these two forms of cultural and social capital because they can be potentially influenced by campus organizations support.

Social capital refers to information and economic resources that are tied to one's social relationships (Ellison et al., 2007; Mazonni & Iannone, 2014). This can include physical resources such as financial help or housing, and college-going knowledge, resources that FGCS may not readily have in their immediate families (Cooper, 2011; Takimoto et al, 2021). Research has shown that college organizations may be a source of social capital in which LFGCS can meet peers and mentors who have information on college resources and norms and can provide opportunities for developing academic and social networks (Cooper, 2011).

Navigational capital refers to how one must maneuver through different social institutions. This can be especially important for Latinx students as they navigate a college setting that typically was not created for students of color. In their research on Mexican American students, Arrellano and Padilla (1996) and Solorzano and Villalpando (1998) found that not only can individual resilience play a role in how students navigate college, but being supported by family and community members also plays a role. This navigational resilience suggests that social and familial capital can intertwine with navigational capital. This support system can offer emotional support, advice, and other resources to LFGCS to develop social and psychological skills to better handle the stress and negative experiences they can face in college (Arrellano & Padilla, 1996; Solorzano & Villalpando, 1998). In sum, navigational capital allows these supportive networks and resources to help LFGCS learn to navigate unsupportive or even racially hostile educational institutions and cultivate a sense of belonging and academic self-efficacy (Garriot, 2020).

To build on the CRT and CCW literatures on LFGCS' lived experiences and the roles of potential factors that contextualize their educational pathways, an important goal of this dissertation was to draw on the literature and theoretical framework of CRT and CCW, I formulated and tested a model hypothesizing that navigational capital and ASE would sequentially mediate the relationship between support from college organizations on campus and persistence in college (see Figure 1). College organization support may foster the development of LFGCS' navigational capital and their ASE by helping them develop coping and navigational strategies

through guidance and observing their peers and mentors, which in turn, will relate to their perceived persistence in college. I now review the literature on each of these constructs.

Campus Organizations Support and Navigational Capital

When Latinx students enter college, they may be able to find ways to join various organizations on campus that can connect them to academic college resources and support and provide a safe space to discuss their experiences of discrimination and isolation in the classroom and their majors. Research has shown that for the broader Latinx student population, those who attend college preparatory high schools report higher motivation and informational capital than those who attend more under-resourced schools (Acevedo, 2020). While many Latinx students may not have this informational support and social and navigational capital before entering college, they do enter college with high levels of motivation to succeed and educational aspirations (Cooper, 2011; Azmitia et al., 2018). Having access to organizations and resources in the college they attend can be key for helping them acquire the social and navigational capital that allows them to succeed academically and engage in positive social comparisons with their continuing generation peers and other first generation college students of different ethnic and social class backgrounds. It may be easier to access these resources at Hispanic Serving Institutions (HSI), in which Latinx students constitute at least 25% of the student body (Santiago, 2006). These schools are more likely to have organizations and resource centers that help establish cultural congruity for Latinx students and can offer them ways to better navigate college and

validate their struggles (Chun et al., 2016; Covarrubias et al., 2019; Hernandez et al., 2022).

Further, HSIs can be particularly helpful for LFGCS because different Latinx groups can use their common experiences and similar cultural values to bond and increase their sense of belonging in the institution by meeting Latinx peers in their classrooms and majors, being together, and having conversations about their social and academic experiences (Crosnoe, 2011; Delgado et al, 2016). While HSIs may still align with White middle-class culture in their structure and curriculum, longitudinal interventions have shown that HSI settings can promote Latinx students' belonging and offer important resources through organizations that act as contexts of social support, validate cultural practices and identities, and help create strong support networks that are associated with Latinx students' persistence in college. Further, these spaces may also allow them to connect with mentors and FGCS and continuing generation college students of different ethnic backgrounds for support to navigate college. (Kezar, et al., 2022).

In their research on Latinx-focused organizations, Cervantes and colleagues (2022) found that Latino men who were struggling academically and were enrolled in men of color focused organizations on campus reported increased sense of belonging and stated that these organizations helped them connect socially with others who faced similar academic struggles. Because Latinx men are more likely than Latinx women drop out of college, it is especially important to find ways to support their persistence to graduation (Hurtado et al., 2020). Further, a survey study by Madni

(2008) on the general Latinx student population showed that those who were aware of and used academic services on campus were more likely to feel positively towards the academic environment and perceived it as more supportive and less discriminatory. Madni's study underscores the need for supportive services for Latinx students that feel welcoming and that have counselors or tutors who are informative, fair, and treat them equally, which allows students to feel more confident in their academics and improves their sense of belonging on campus. Relating organization support to community cultural wealth, research suggests that Latinx FGCS who tapped into these college organizations were able to access navigational and social capital from peers and faculty mentors who acted as role models of successful people in academia and contributed to LFGCS' future ideation and persistence. This allowed them to perform better academically and improve their well-being while they were in college, as they could better predict and navigate their college workload and stressors (Perez, 2014). Taken together, this research suggests that organizations on campus can be important sources of support and strengthen LFGCS' navigational and social capital, academic self-efficacy, and perceived persistence to graduation.

Academic Self-Efficacy and Perceived Persistence Through College

While supportive connections in college organizations can play a vital role in promoting students' wellbeing, LFGCS must also develop strategies that enhance their academic self-efficacy and help them manage their college workloads.

Academic self-efficacy (ASE) refers to confidence in one's ability to engage in behaviors that allow one to attain one's academic goals (Bandura, et al., 1999;

Chemers, et al., 2001, Majer, 2009). ASE has been strongly linked to life satisfaction and achievements, and it plays a crucial role in helping individuals manage everyday challenges (Gore, 2006).

ASE may be influenced by others' guidance and support, with peers and mentors playing an especially important role in students' academic motivation, help-seeking, and career plans and in providing guidance and sources of social comparison (Kinderman, & Gest, 2009) Research has supported the proposal that peer support can be beneficial to college students' ASE by offering guidance and support (Altermatt, 2016; Kinderman, & Gest, 2009; Laksmiwati & Tondok, 2023). Especially relevant for this dissertation, studies have shown that ASE helps LFGCS navigate an unfamiliar and potentially discriminatory environment and increases their sense of belonging at the university by helping them engage with others who share their identity and goals (Gloria & Robinson Kurpius, 2001; Manzano-Sanchez et al., 2018). Research has also shown that college organization support can benefit ASE by reducing students' uncertainty and offering a protective space where students can learn and develop academic skills safely with the help of peers and mentors (Doo & Bonk, 2020). However, this research has predominantly been focused on college students outside of the US and has neither focused on Latinx students nor assessed the relation between organizational support and ASE. In this dissertation, I assessed this relation in LFGCS attending a four-year university in the U.S. Furthermore, I investigated the relation between LFGCS' ASE and their navigational capital, which to my knowledge, has not been investigated in previous research

As discussed earlier, ASE can play important roles in students' academic success. Beyond these factors, graduating from college with a degree is an important goal and motivates FGCS to persist despite challenges and seek resources to support their college journeys (Cooper, 2011). Therefore, understanding how college organizations, navigational capital, and ASE contribute to persistence in college is essential. Persistence in college can be defined as one's desire and ability to remain enrolled in college until degree completion (U.S. Department of Education; National Center of Educational Service, 2013; Strom & Savage, 2014). Research on Latinx students has shown that their persistence rates are lower compared to their White and Asian peers, with only 50% graduating within 6 years (Aud et al., 2012). Possibly, this difference in rates of persistence to graduation occurs because Latinx students often enter college unsure how to navigate a system that tends to be culturally and structurally different from their own communities and favors White middle-class values, beliefs, and practices (Azmitia et al., 2018; Covarrubias et al., 2019; Oyserman & Lewis, 2017). While there is plenty of research showing how Latinx students struggle to persist in college, in my dissertation I wanted to contribute to work underscoring the importance of the social and navigational capital afforded by campus organizations, ASE, and Latinx students' persistence, that is, approach LFGCS' college pathways from a strength-based approach.

Using a strength-based approach regarding support, Simmons and Smith (2020) found that Latinx and Black students who were part of a peer mentoring program were more likely to graduate in four years than those who were not a part of

the mentoring program. Students reported that the mentoring program allowed them to overcome feelings of doubt and gave them access to information to feel confident about their academic skills and success and potential to graduate. In a qualitative interview study by Luna and Martinez (2012), Latinx students reported that their navigational capital often was intertwined with their aspirational capital and was fueled by their families' encouragement, which motivated them to pursue and graduate from college. The students named their families as sources of aspirational capital, capital that draws on one's hopes and dreams, and as a result, they actively looked for ways to increase their navigational capital by actively finding resources and connections to manage the challenges they faced in college and succeed for their family. The researchers stressed the importance of recognizing that students' aspirations to succeed and navigational capital are often intertwined together to motivate Latinx students to persist in college. However, studies focused on Latinx students in STEM have shown that aspirational capital, and not navigational capital, was significantly associated with persistence (Lawson & Fong, 2024). For my dissertation, I aimed to address these mixed findings by assessing the navigational and social capital that potentially accrue from participating in organizations in a broader range of academic disciplines. In addition, because much of the research has primarily focused on whether students persist into the next year, and not to graduation, this dissertation aimed to investigate LFGCS' perceptions of persistence beyond the first year of college and their potential for finishing college. Given the low rates of graduation for LFGCS, this study contributes to our understanding of

how developing navigational and social capital and engagement in campus organizations can help them adjust to and perceive that they will finish college.

The Current Study

In this dissertation study, I surveyed LFGCS attending an HSI in northern California to investigate the association between their college organization support and navigational capital and their academic self-efficacy and perceived persistence in college. I investigated two issues: (1) the role of college organization support (i.e., social capital) on navigational capital and LFGCS' academic self-efficacy and (2) the role of LFGCS college organization support, navigational capital, and academic self-efficacy on their persistence in college. I hypothesized that college organization support would predict persistence in college through the sequential mediation of navigational capital and academic self-efficacy.

Methods

Participants

The sample was drawn from a larger study of 367 ethnically diverse college students that included first and continuing generation college students. Participants were recruited at a Northern California HSI public university through the Psychology Department's participant pool on SONA and flyers emailed to campus support organizations, including the Educational Opportunity Program (EOP), Services for Transfer Re-Entry and Resilient Scholars (STARRS), and the Hispanic Serving Institutions (HSI) Initiatives office. Some participants were recruited from classes and

received extra credit for participating.

For this dissertation, I selected the subsample of 110 participants who self-identified as Latinx, Latino/a, Latine, or Hispanic and first-generation college students (FGCS) and were members of at least one college organization. The average age of these participants was 21.65 years old (Range of 18-34 years old). Of the 110 participants, 17 (15.5%) identified as sophomores¹, 54 (49.1%) third years/juniors, 31 (28.2%) identified as fourth years/seniors, and 8 (1.86 %) were fifth years and above. Regarding participants gender identity, 93 (84.5%) identified as female, 10(5.5%) identified as male, 6 (4.3%) identified as non-binary, and 1 (.7%) preferred not to answer. Thirty-three (30%) of the participants were transfer students.

Survey Measures

The survey was administered through Qualtrics and included questions about FGCS' friendships in college, experience with organizations on campus, their aspirational and navigational capital, their academic experiences and psychological well-being, and their perceptions perceived persistence in college. Demographic questions and open-response questions appeared at the beginning of the survey and were followed by the measures described below. Appendix A includes a copy of the survey. For this dissertation, I only used the demographic information and the measures of LFGCS' support of campus organizations, their navigational capital,

¹ Because I was interested in FGCS' participation in organizations and the support they received from them, I decided not to recruit freshmen, who may not yet be consistently involved in campus organizations.

academic-self-efficacy, and perceived persistence to graduation to assess how support and capital related to the academic aspects of college for LFGCS, the measures relevant to my research questions and hypothesis.

College Organizations Support

All participants were involved with at least one campus organization ($m=2.01$, range = 1 to 4) as indicated by their responses in the survey. Examples of organizations students listed were EOP, STARS, the Cantu Center for LGBTQ+ people, sororities, and fraternities. Participants were asked about the perceived support they received in their college organizations using a 5-item scale adapted from Lent et al. (2005). In particular, they rated items on a 5-point Likert scale between 1 (Strongly Disagree) to 5 (Strongly Agree) to assess the perceived availability of support from the college organizations they reported being involved in. This scale included questions such as “I feel that there are people “like me” in my campus organizations” and “I have received helpful assistance from people in my campus organization(s).” As the scale measures support from all the organizations, it was not possible to assess whether the participants perceived some of these organizations as more supportive than others. A Cronbach’s alpha of .81 was reported in Lent et al.’s (2005) study. For this dissertation, a Cronbach’s alpha of .82 was obtained, showing good reliability for this sample.

Academic Self-Efficacy

Academic self-efficacy was measured using an 8-item scale developed by

Chemers et al. (2001). Participants were asked to rate, on a 7-point Likert scale between 1 (Very Untrue) to 7 (Very True), statements that reflected their perceptions of their academic competence. Sample statements included “I know how to schedule my time to accomplish my tasks” and “I am very capable of succeeding at the university.” A Cronbach’s alpha of .81 was found in previous studies (Chemers et al., 2001). For this study, Cronbach’s alpha of .83 was reported, showing good reliability for the scale.

Navigational Capital

Navigational capital was measured using a 5-item scale developed by Sablan (2018). Participants provided their responses to items, on a 6-point Likert scale between 1 (Not Like Me at All) to 6 (Exactly Like Me), to rate their perceptions of their skills at navigating college. Sample statements included “Even when I have limited resources (e.g., finances), I find ways to secure the essentials for my education (e.g., tuition, books).” A Cronbach’s alpha of .83 was found in the author’s previous studies (Sablan, 2018). For this study, a Cronbach’s alpha of .73 was obtained, showing acceptable reliability for the scale.

Multidimensional Persistence Scale

Perceived persistence in college was measured with a modified version of the Multidimensional Persistence Scale (MPS) 13-item scale developed by Howard and Crayne (2019). The MPS is comprised of three subscales: Persistent Despite Difficulty (PDD), Persistent Despite Fear (PDF), and Inappropriate Persistence (IP).

The five Persistent Despite Difficulty items measure continued efforts towards goals regardless of the difficulties that students perceive. The Persistent Despite Fear subscale is comprised of five items that assess persistence despite being afraid. The three Inappropriate Persistence items addressed persistence towards an unrewarding or worthless goal. This scale was modified by Bámaca (2023) with 12 of the original 13 MPS items adjusted to be more relevant to college students by adding the phrase “my education” to all items except for question 3. For example, one original item was “People describe me as someone who can stick at a task, even when it gets difficult.” This item was modified to “People describe me as someone who can stick at a task in my education, even when it gets difficult”. Participants were asked to use a 4-point Likert scale between 1 (Not Like Me at All) to 4 (Very Much Like Me) to respond to the statements. Sample items included “If I am worried or anxious about something related to my education, I will do or face it anyway.” A Cronbach’s alpha of .89 was found in the author’s previous studies (Bámaca, 2023). For this study, a Cronbach’s alpha of .83 was obtained, showing good reliability for the scale.

An exploratory factor analysis (EFA) showed that PDD, PDF and IP subscales loaded into three separate factors. After running this EFA, a correlation was conducted to assess if any of these factors related to the variables of interest. The correlations showed that the IP subscale did not correlate with any of the variables of interest, so it was removed from the composite score of PDD and PDF (See Table 1 for this correlation, Table 2 for the pattern matrix, and Figure 3 for the scree plot).

Procedure

After signing up for the study, participants were emailed a link to the survey that included a brief explanation of the project and a consent form in which they agreed or declined to participate in the study. If they agreed to participate, they were electronically transferred to the survey which was administered through Qualtrics. After they completed the survey, participants received course credit for their participation if they were recruited through the participant pool or individual classes, or, if they were recruited through other means, a \$10 gift card. This study was approved by the Institutional Review Board at the university, HS-FY2024-36.

Results

Analyses Plan

The results are organized as follows. First, I present the descriptive statistics for the variables of interest. Second, I present the bivariate Pearson correlations to examine the strength and direction of the association between the variables to determine whether the mediation analysis could be carried out. I used these correlations to assess whether I should include the control variable year in college and transfer status by assessing if these two control variables were correlated significantly with any of the variables of interest. Year in college was grouped as (1) sophomores and juniors compared against (2) seniors—which combined fourth- and fifth-year seniors. Transfer status was coded as (1) yes or (2) no. Third, depending on whether the covariates were found to significantly correlate with the variables of interest, I

carried out independent samples t-tests between the control variables and each variable of interest. This was done to determine if the control variables should then be included in the mediation analysis. Because the sample was primarily, female, gender was not included as a control variable in any of the subsequent analyses. Fourth, I present my sequential mediation analysis. To test my hypothesis, I conducted a sequential mediation analysis through PROCESS macro model 6 in SPSS. For the sequential mediation analysis, college organization was the predictor variable, with navigational capital as the first mediator and academic self-efficacy as the second mediator, and perceived persistence in college the predicted (outcome) variable. A sequential mediation analysis assesses the relationship between a predictor (college organization support) and an outcome variable (perceived persistence in college) via potential mediators that chain together (navigational capital and ASE). I hypothesized that college organization support would predict perceived persistence in college through the sequential mediation of navigational capital and academic self-efficacy.

Descriptives Statistics

Table 3 presents the descriptive statistics for the variables in the study. For college organization support, the mean was 3.60 and the std. error was .068. For navigational capital, the mean was 4.36, and the std. error was .065. For academic self-efficacy, the mean was 5.18, and the std. error was .090. Finally, for perceived persistence in college, the mean was 3.40, and the std. error was .043. The data were negatively skewed for college organization support (skewness = $-.747$, std. error. = $.230$), ASE (skewness = $-.644$, std. error. = $.231$) and perceived persistence in college

(skewness = -.643, std. error. = .234). To address this skewness, I first removed 10 participants who were outliers and then performed a reflection transformation to make the skewness positive and then subsequently performed a square root transformation to normalize the distribution. Therefore, the analytic sample for this study was reduced to 100 participants. As seen in Table 4, after these transformations the data were now within acceptable ranges for college organization support (skewness = .249 std. error. = .230), ASE (skewness = .250, std. error. = .231) and perceived persistence in college (skewness = .408, std. error. = .234). Because I transformed these variables through reflection and square root transformation, the values were now negative. This corresponds to the inverse of the original relationships observed in the raw data before the reflection and square root transformation, which were initially positive values. These transformed variables were used for the Pearson correlations, independent samples t-tests, and sequential mediation analysis.

Pearson Correlations Between the Variables and Covariates

Pearson correlations were conducted to examine the strength and direction of the association between the variables. As seen in Table 5, the overall correlation patterns showed that while college organization support was significantly correlated with navigational capital, ($r(110) = -.465, p < .01$) and academic self-efficacy ($r(109) = .279, p < .01$), it was not significantly correlated with perceived persistence in college ($r(107) = .109, p = .26$). Further, navigational capital was significantly correlated with academic self-efficacy ($r(109) = -.355, p < .01$) and perceived

persistence in college ($r(107) = -.322, p < .01$). Finally, academic self-efficacy was significantly correlated with perceived persistence in college ($r(109) = .471, p < .01$). While participation in college organizations did not correlate with perceived persistence in college, it did correlate with the two mediators (ASE and Navigational Capital). These significant correlations justified continuing with the sequential mediation analysis.

Regarding the control variables, year in college and transfer status, transfer status was not correlated to any of the variables of interest, so it was excluded from the analysis. However, year in college was significantly correlated with college organization ($r(110) = .199, p < .05$) and ASE ($r(106) = .242, p < .05$). To further assess if there was a difference between the control variable year in college on the variables of interest, independent t-tests were conducted by grouping sophomores and juniors into one category and seniors into another and carrying out year-in-college comparisons for the variables of interest.

Independent samples T-Test for College Year on the Variables of Interest

As shown in Table 6 for year in college, the independent samples t-test showed there was a significant difference between sophomores and juniors as compared to seniors on college organization support, ($t(108) = 2.114, p = .03$) with sophomores and juniors ($M = 1.56, SD = .218, n = 71$) reporting higher college organization support than seniors ($M = 1.46, SD = .240, n = 39$). Furthermore, there was a significant difference between juniors and sophomores compared to seniors on academic self-efficacy, ($t(107) = 2.583, p = .01$) with sophomores and juniors ($M =$

1.66, $SD = .286$, $n = 71$) reporting higher ASE than seniors ($M = 1.52$, $SD = .254$, $n = 39$). There were no significant differences of year in college on navigational capital or perceived persistence in college. Due to these results, year in college was included as a covariate in the mediation analysis

Sequential Mediation Analysis

I hypothesized that college organization support would predict LFGCS' perceived persistence in college through the sequential mediation of navigational capital and academic self-efficacy. College organization support, ASE, and perceived persistence in college were transformed using reflection transformation followed by square root transformations to address skewness and improve normality and will be reported as negative values due to these transformations. I will focus on the direct effect, total effect, and the three indirect effects for the sequential mediation analysis. For more details about the regressions for this analysis, see table 7, 8, and 9.

Table 10 shows the total effect, direct effect, and the indirect total effect and three indirect effects that were analyzed. The total effect of college organization support on perceived persistence in college was not significant ($\beta = -.045$, $\beta_{se} = .074$, $p = .540$, 95% CI [-.19, .10]). Further, when accounting for the mediators in the direct effect, college organization support did not predict persistence in college ($\beta = -.045$, $\beta_{se} = .074$, $p = .205$, 95% CI [-.05, .24]).

The total indirect effect of the sequential mediation analysis was significant ($\beta = .140$, $BSE = .057$, CI [.041, .26]), suggesting that navigational capital and ASE together predicted the effect of college organization support on perceived persistence

in college. The first indirect effect, which assessed the effect of college organization support on perceived persistence in college through the mediation of navigational capital, was not significant ($\beta = 0.06$, BSE = 0.04, CI [-.01, .17]). For the second indirect effect, the effect of college organization support on perceived persistence in college through the mediation of academic self-efficacy, was not significant, ($\beta = 0.12$, BSE = 0.03, CI [-.06, .09]). However, for the third indirect effect, the effect of college organizations support on perceived persistence in college through the mediation of navigational capital and academic self-efficacy was significant. ($\beta = .06$, BSE = 0.02, CI [.02, .12]).

Taken together, these results suggest that the total and direct effects of college organization support did not by itself predict perceived persistence in college. However, when assessing the total indirect effect of the variables, the relationship between college organization support and perceived persistence in college was significantly and sequentially mediated by navigational capital and academic self-efficacy, as predicted (see Figure 2).

Discussion

In this dissertation study, I surveyed LFGCS to investigate the associations between their college organization support, navigational capital, academic self-efficacy, and perceived persistence in college. I investigated two issues: (1) the role of college organization support in LFGCS' navigational capital and academic self-efficacy, and (2) the roles of LFGCS' college organization support, navigational capital and academic self-efficacy in their persistence in college. I hypothesized that

college organization support would predict persistence in college through the sequential mediation of navigational capital and academic self-efficacy. My hypothesis was supported, as the mediation analysis showed that the association between participation in organizations and perceived persistence in college was fully and sequentially mediated through navigational capital and academic self-efficacy. In addition, t-tests showed that sophomores/juniors reported higher organizational support and ASE than seniors. Perhaps by the time they are seniors, LFGCS are more focused on their studies and have less time to participate in organizations or need less support from them. Also, the increased difficulty of their coursework and the social comparisons to their peers concerning their grades and potential for advanced studies or a job in their profession may result in lowered ASE. While interventions to increase belonging and ASE typically focus on first year or sophomore students, these findings suggest that juniors and seniors would also benefit from these opportunities.

College Organization Support and Navigational Capital

My dissertation drew on two theoretical frameworks. I applied Critical Race Theory (CRT) to conceptualize how racism and oppression are incorporated into social structures such as the legal and education system and challenge LFGCS' navigation of academic and social spaces in higher education (Azmitia et al., 2023; Delgado 1995; Ladson-Billings, 1998). I applied the Community Cultural Wealth Perspective (CCW), centers POC students experiences within educational institutions to challenge the deficit thinking that permeates education and build on POC's strengths, agency, and resilience (Yosso, 2005). Because LFGCS often come into

college with little college-going knowledge and may have cultural values and practices that differ from the white middle class college environment, focusing on how they navigate academic and social contexts is key to applying a strength-based approach to theory, research, and interventions designed to support LFGCS' adjustment and persistence to graduation.

Consistent with the theoretical framework of CRT and CCW, my findings support previous research showing that college organization support can act as a source of navigational capital for LFGCS by offering a place they can connect to mentors and peers for social and academic support and strategies for navigating the college environment (Crosnoe, 2011; Delgado et al, 2016). In the present study, students often named organizations such as ethnic resources centers and the Educational Opportunities Program (EOP) as sources of academic and social support. These organizations also offer a safe space in college for Latinx identifying students, which is important as they can feel culturally and socially different and isolated when in a university that often privileges White and middle-class practices and values (Azmitia et al., 2018; Covarrubias et al.,2019; Oyserman & Lewis, 2017). Therefore, these organizations play an important role in Latinx students' social capital, sense of belonging, and academic self-efficacy in research intensive HSIs. The academic and social skills and networks that they gain in these organizations are a source of navigational capital for succeeding in their universities. This can be particularly important for LFGCS students when they are unsure how to navigate the hidden curriculum of academia and allows them to find ways to navigate or avoid hostile or

unsupportive environments in college that can exist outside of college organizations (Arrellano & Padilla, 1996; Solorzano & Villalpando, 1998; Perez, 2014). These findings contribute to the literature by integrating CRT and CCW literature, connecting it to the context of Latinx FGCS strengths. and pushing back against the prevailing deficit viewpoint in the literature about Latinx students' educational motivation, aspirations, resilience, and success.

Academic Self-Efficacy and Perceived Persistence Through College

This dissertation also contributes to the literature by assessing the relationship between navigational capital and ASE, which to my knowledge, has not been previously investigated. As previously mentioned, my findings suggest that participating in college organizations affords LFGCS information and resources to navigate college effectively and confidently. In turn, these skills and confidence can potentially lead these students to also find resources to build their academic skills and ASE to succeed in their academic and professional activities. Further, my findings make a clearer connection between LFGCS' ASE and perceived persistence to graduation; previous studies have only examined persistence into the next academic year (Chun et al., 2016; Covarrubias et al., 2019; Hernandez et al., 2022; Perez, 2014) and not their perceptions of whether they will graduate from college. My findings extend Bámaca's (2023) findings concerning minoritized students perceived persistence in college to LGFCS' attending an R1, HSI public university in northern California.

Unexpectedly, there was no significant correlation or direct relationship

between college organization support and perceived persistence in college. This finding suggests that college organization support by itself is not directly related to LFGCS' perceptions of whether they will persist to graduation, but rather, it exerts its effect through ASE and navigational capital, as evidenced by the results of the sequential mediation analysis. These results contribute to the literature by showing that college organization support can help build navigational capital, which can in turn promote ASE and LFGCS' perceptions of whether they will persist in college. Encouraging LFGCS to participate in organizations may also promote their sense of belonging, which has consistently been shown to be related to academic and social adjustment, well-being, and persistence in college (Gutierrez-Serrano et al., 2023; Takimoto et al., 2021).

Limitations and Future Directions

While this study contributes to research on the role of organizations, navigational capital, and academic self-efficacy in Latinx FGCS' perceived persistence in college, it had several limitations. First, data was collected in a selective R1 coastal northern California HSI public university. The findings may not be generalizable to LFGCS in other parts of the United States or to less selective public and private universities and non-HSIs. Because LFGCS often attend primarily White universities that embody middle/upper class values of independence and competition and privilege academic over family obligations (Stephens et al., 2012), it will be important to assess further the role of specific college organizations in demystifying the hidden curriculum and promoting social and navigational capital

and ASE in PWIs. Also, the measure of college organization support did not allow me to address whether ethnic resource centers and organizations that specifically target LFGCS are more effective contexts for mastering the hidden curriculum and promoting social and navigational capital and ASE than other organizations LFGCS join, including fraternities, sororities, and clubs. Second, because most of the participants were female, I was unable to assess gender variations, an important limitation because Latinx males are less likely than females to graduate from college. Third, this study was also cross-sectional, which only captured Latinx FGCS' experiences at one moment in time. Measuring factors that influence perceived persistence to graduation longitudinally is important for improving LFGCS' graduation rates and developing supports and intervention programs designed to help them adjust and succeed socially and academically (Covarrubias et al., 2022; Stephens et al., 2015). Finally, given the small sample size, it is possible that lack of statistical power prevented me from finding a direct association between organizational support and perceived persistence in college.

To address these limitations, these results should be replicated with a larger sample and future research should test my hypothesis in less selective, HSI universities with fewer resources or PWIs with low numbers of LFGCS to assess how the present findings apply to LFGCS in these spaces (cf., Stephens et al., 2023). In these contexts, universities may need to be creative in finding resources for organizations that serve LGFCS or find other ways to demystify the hidden curriculum, such as providing information through social media or opportunities for

faculty and peer mentoring. Recruiting a more balanced sample, and in particular, recruiting more male LFGCS, is essential because they are less likely than females LFGCS to finish college (Hurtado et al., 2020) and report higher rates of discrimination, sleep disturbances, and academic distress (Pichardo et al., 2021). Future research should also consider interviewing LFGCS' to better understand the roles of organization support, navigational capital, and academic self-efficacy in their lived experiences in college and their persistence to graduation. Initially focusing these interviews on seniors may be a useful first step, as they have persisted to graduation. Additionally, exit interviews of LGFCS who decide to leave their universities before graduating would be useful for gaining a deeper understanding of their resources and challenges. Finally, a longitudinal design could reveal how changes in the support afforded by college organizations, along with changes in LFGCS' navigational capital and academic self-efficacy over time relate to their perceived persistence to graduation and why sophomores and juniors found these organizations more effective for their navigational capital and ASE.

Conclusion

In conclusion, this study demonstrates that college organization support is indirectly related to perceived persistence through the sequential mediation of navigational capital and ASE. These findings can inform future theory, research, and interventions in HSI and non-HIS universities and increase our understanding of LFGCS' lived experience in the American college system. This dissertation contributes to the existing literature on Latinx and FG students by focusing on their

strengths and abilities to overcome challenges by joining organizations and networking in ways that increase their navigational capital and benefit their ASE and confidence that they will finish college. Together, these findings underscore how using a strength-based perspective is particularly helpful for university initiatives specifically designed to support first generation students, including the Equal Opportunity Program and ethnic resource centers focused on supporting Latinx students, closing equity gaps at the university, and challenging the deficit view of LFGCS skills and educational aspirations. Further, the findings may help PWI, R1, universities to better understand the lived experiences of Latinx first- and continuing generation college students and offer them more support through institutional and campus organizations.

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<https://doi.org/10.1080/1361332052000341006>

Figures

Figure 1.

Conceptual model for testing H1, college organization support predicting LFGCS persistence in college through the sequential mediation of navigational capital and academic self-efficacy.

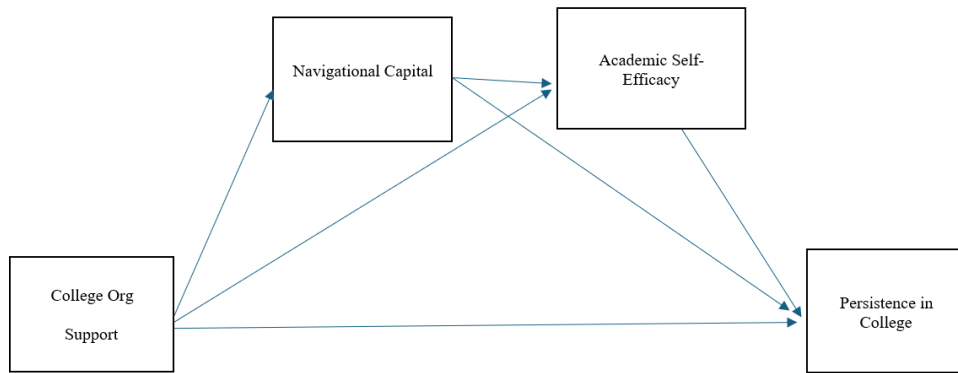


Figure 2.

Results for the test of the conceptual model for college organization support predicting LFGCS persistence in college through the sequential mediation of navigational capital and academic self-efficacy with values on pathways.

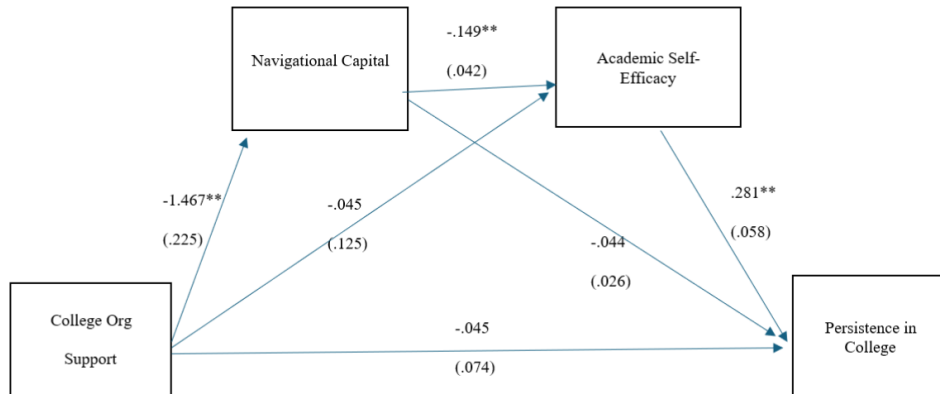
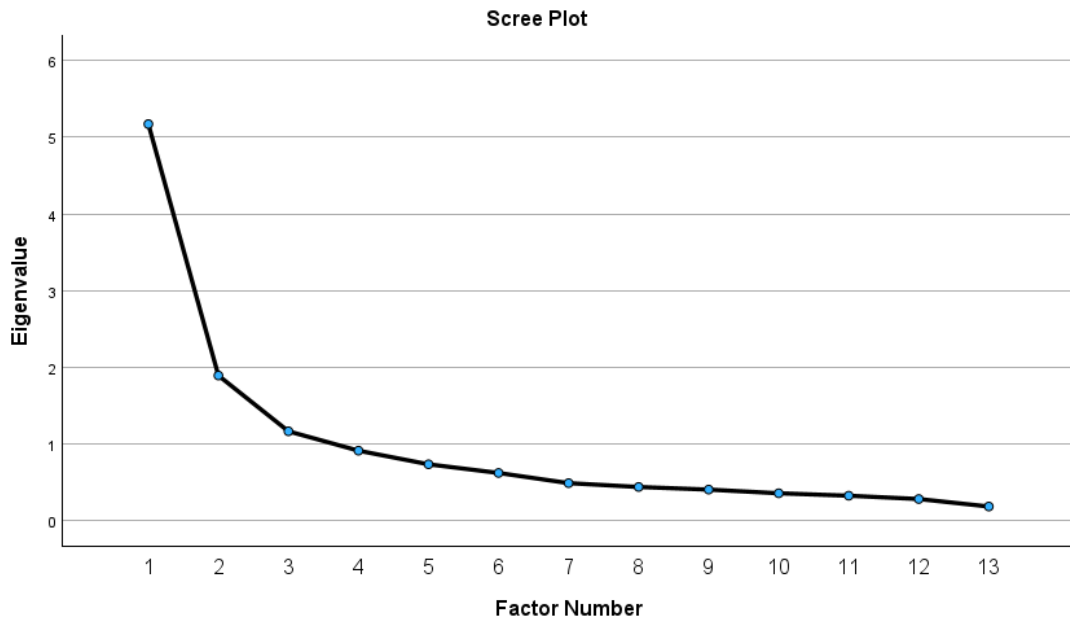


Figure 3.

Scree plot for EFA



Tables

Table 1.
Correlation for Perceived Persistence Factors on the Variables for EFA.

Variables	1.	2.	3.	4.	5.	6.
1. Factor 1 Persistence	1.000	.634**	.265	-.084	.293	-.497**
2. Factor 2 Persistence		1.000	.256**	-.143	.301**	-.314**
3. Factor 3 (IP)			1.000	.070	-.023	.093
4. College Organization Support				1.000	-.465	.279**
5. Navigational Capital					1.000	-.355**
6. Academic Self- Efficacy						1.000

Table 2.
Patten Matrix for EFA.

	Factor		
	1	2	3
I keep on going when my education gets tough.	.624		
People describe me as someone who can stick at a task in my education, even when it gets difficult.	.471		
Even if it's difficult to understand, I will read an entire book until I "get" it.	.467		
Setbacks in my education do not discourage me.	.732		
Even if something is hard in my education, I will keep trying at it.	.667		
I tend to face my fears in my education.	.696		
Even if I feel terrified, I will stay committed to my education until I have done what I need to do.		-.924	
I stay persistent in my education even when I am scared of things.		-.848	
If I am worried or anxious about something related to my education, I will do or face it anyway.		-.588	
If something is scary in my education, I will do it anyways.		-.488	
In my education sometimes I find myself continuing to do something, even when there is no point in carrying on.			.636

In my education sometimes I will keep doing the same thing over and over, but I believe that it is normal to do so.	.717
In my education I will keep trying at something, even if I know my actions are worthless.	.847
<p>Extraction Method: Maximum Likelihood.</p> <p>Rotation Method: Oblimin with Kaiser Normalization.^a</p> <p>a. Rotation converged in 12 iterations.</p>	

Table 3
Descriptive Statistics of the Variables

	N	Range	Min Stat	Max Stat	Mean	Mean S.E.	Std. Dev	Skewness Stat,	Skewness S.E.	Kurtosis	Kurtosis S.E
College Org Support	110	3.40	1.60	5.00	3.603	.068	.722	-.747	.230	.777	.457
Navigational Capital	110	3.40	2.40	5.80	4.3618	.065	.683	-.220	.230	-.109	.457
Academic Self-Efficacy	109	4.00	2.88	6.88	5.183	5.183	.941	-.644	.231	-.083	.459
Persistence in College	107	2.10	1.90	4.00	3.400	.043	.446	.643	.234	.199	.463
Valid N (listwise)	106										

Table 4
Descriptive Statistics of the Variables after Reflection and Square Root Transformations

	N	Range	Min Stat	Max Stat	Mean	Mean S.E.	Std. Dev	Skewness Stat,	Skewness S.E.	Kurtosis Stat,	Skewness S.E
College Org Support	110	1.10	1.00	2.10	1.531	.021	.230	.249	.230	.416	.457
Navigational Capital	110	3.40	2.40	5.80	4.361	.065	.683	-.2200	.230	-.109	.457
Academic Self-Efficacy	109	1.23	1.00	2.24	1.617	.027	.283	.250	.231	-.343	.459
Persistence in College	107	.76	1.00	1.76	1.253	.016	.172	.408	.234	-.708	.463
Valid N (listwise)	106										

Table 5

Pearson Correlations Between the Variables

Variables	1.	2.	3.	4.	5.	6.
1. College Organization Support	1.000	-.465**	.279* *	.109	.199*	.082
2. Navigational Capital		1.000	.- .355* *	- .322* *	-.025	.048
3. Academic Self-Efficacy			1.000	.471* *	.242*	-.017
4. Perceived Persistence in College				1.000	.517	.273
5. Year in College					1.000	-.054
6. Transfer Status						1.000

* $p < .05$. ** $p < .01$.

Table 6

Independent Samples T-test for Year in College on the Variables

Variable	Group	N	Mean	SD	T	Df	Sig. (2-tailed)	Mean Difference
College Organization Support	Soph/Juniors	71	1.564	.218	2.114	108	.03	.0955
	Seniors	39	1.469	.240	2.055	72.167	.04	.0955
Navigational Capital	Soph/Juniors	71	4.349	.611	-.258	108	.79	-.03532
	Seniors	39	4.384	.807	-.238	62.34	.81	.14819
Academic Self-Efficacy	Soph/Juniors	71	1.667	.286	2.583	108	.01	.14342
	Seniors	38	1.524	.789	-1.35	102.69	.18	-.20713
Persistence in College	Soph/Juniors	70	1.245	.172	-.651	105	.517	-.02294
	Seniors	37	1.268	.174	.028	72.806	.518	-.02294

Table 7

College Organization Support on Navigational Capital

Model	R	R Square	Mean Std. Error	F	Df1	Df2	p
1	.493 ^a	.243	.354	16.553	2	103	.000

^a Dependent Variable: Navigational Capital
 Predictors: (Constant), College Organization Support

	B	S.E.	T	Sig.	95.0% Confidence Interval for B	
					Lower Bound	Upper Bound
Constant	6.5362	.390	16.7574	.000	5.7626	7.3097
College Organization Support	-1.4673	.2551	-5.7512	.000	-1.9733	-.9613
Year in College	.1059	.1240	.8538	.3952	-.1401	.3519

a. Dependent Variable: Navigational Capital

Table 8
College Organization Support and Navigational Capital on Academic Self-Efficacy

Model	R	R Square	Mean Std. Error	F	Df1	Df2	p
1	.437 ^a	.190	.064	8.0133	3	102	.000

^a Dependent Variable: Academic Self-Efficacy
 Predictors: (Constant), College Organization Support, Navigational Capital

	B	S.E.	<i>T</i>	Sig.	95.0% Confidence Interval for B	
					Lower Bound	Upper Bound
Constant	2.1351	.320	6.6532	.000	1.4986	2.7716
College Organization Support	.045	.125	.3668	.714	-.202	.293
Navigational Capital	-.149	.042	-3.569	.000	-.233	-.066
Year in College	.112	.053	2.128	.035	.007	.218

Table 9
College Organization Support, Navigational Capital and Academic Self-Efficacy on Persistence in College

Model	R	R Square	Mean Std. Error	F	Df1	Df2	p
1	.522 ^a	.272	.022	9.474	4	101	.000

^a Dependent Variable: Persistence in College
 Predictors: (Constant), College Organization Support, Navigational Capital, Academic Self-Efficacy

	B	S.E.	T	Sig.	95.0% Confidence Interval for B	
					Lower Bound	Upper Bound
Constant	1.097	.228	4.803	.000	.644	1.550
College Organization Support	-.045	.074	-.614	.540	-.193	.101
Navigational Capital,	-.044	.026	-1.682	.095	-.097	.008
Academic Self-Efficacy	.281	.058	4.789	.000	.165	.398
Year in College	-.057	.032	-1.778	.078	-.121	.006

Table 10

Total effects of College Organization on Perceived Persistence

Effect	Std. Error	T	P	Lower Bound	Upper Bound
.094	.074	1.273	.205	-.052	.241

Direct effects of College Organization on Perceived Persistence

Effect	Std. Error	T	P	Lower Bound	Upper Bound
-.045	.074	-.614	.540	-.193	.101

Indirect effects

	Effect	Boot Std. Error	Boot Lower Bound	Boot Upper Bound
Total	.140	.057	.041	.263
Ind1	.065	.045	-.011	.170
Ind2	.012	.037	-.060	.090
Ind3	.062	.027	.027	.059

Indirect effect key:

Ind1 College Organization -> Navigation Capital -> Persistence in College

Ind2 College Organization -> Academic Self-Efficacy -> Persistence in College

Ind3 College Organization -> Navigation Capital -> Academic Self-Efficacy -> Persistence in College

Appendix A: Survey Instrument

Q1 Please check one of the boxes below to indicate whether you agree to participate in the study

- I have read through the description of the study and agree to participate.
- I have read through the description of the study and have decided not to participate.

Q3 I am at least 18-years-old

- Yes
- No

Q4 What ethnic backgrounds do you identify as? (IE; Mexican, Salvadorian, Peruvian, Chicax etc.)

Q5 How old are you?

Q6 What is your gender?

- Female
- Male
- Non-Binary
- Prefer not to answer

Q7 Are you a transfer student?

Yes

No

Q9 Where you born in the U.S.?

Yes

No

Q10 If you were not born in the U.S., where were you born?

Q11 If you were not born in the U.S., how old were you when you came to the U.S.?

Q15 How far along are you in college?

First Year/ Freshman

Second Year/ Sophomore

Third Year/ Junior

Fourth Year/ Senior

Fifth Year Senior

Sixth Year or more

Q16 What's your major at UCSC?

Q17 Have you changed your major since coming to UCSC

Yes

No

Q18 What was your original intended major?

Q98 Why did you change your major?

Q19 Do you have friends in your current major?

None

Some

A lot

All my friends are in my major

This set of questions will be about how you felt about starting college and about the ups and downs of your experiences during this time. There is no right or wrong answer to these questions, we just want to know about your feelings and experiences.

Q21 I was excited about starting college.

- Not true for me
- A little true for me
- True for me
- Really true for me

Q22 I was worried about starting college.

- Not true for me
- A little true for me
- True for me
- Really true for me

Q23 I had mixed feelings about starting college.

- Not true for me
- A little true for me
- True for me
- Really true for me

Q29 Sometimes, people feel that they have experienced a turning point in college, something

that changed who they are, what they think of themselves, or the direction they are going in life. Have you experienced a turning point since entering UCSC?

Yes

No

Q30 <div>If yes, what was your turning point? (Please tell us when it happened, what happened, and why you think it was a turning point for you)</div>

Q31 <div>Are you the first person in your immediate family (parents) to go this far in College (you are a first generation college student)?</div>

Yes

No

Q32 Do you have any siblings?

Yes

No

Q33 Have any of your siblings attended or currently attend a four-year university?

Yes

No

Q39 Thank you for telling us a bit about yourself. We will now ask you some questions about your sense of connection with peers and friends at UCSC. There is no right or wrong answer

to these questions, we just want to know what is true for you. At UCSC, I have friends who...

Q37 I can get advice from for problems.

Strongly disagree

Disagree

Slightly disagree

Slightly agree

Agree

Strongly Agree

Q38 I can get advice from about school

Strongly disagree

Disagree

Slightly disagree

Slightly agree

Agree

Strongly Agree

Q39 Are always there for me.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly Agree

Q40 Care about me.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly Agree

Q41 Really know me.

Strongly disagree

Disagree

Slightly disagree

Slightly agree

Agree

Strongly Agree

Q42 I can count on for help

Strongly disagree

Disagree

Slightly disagree

Slightly agree

Agree

Strongly Agree

Q43 I can count on for a favor

Strongly disagree

Disagree

Slightly disagree

Slightly agree

Agree

Strongly Agree

Q44 Friends I'm really close to.

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly Agree

Q45 I can talk to about my worries

- Strongly disagree
- Disagree
- Slightly disagree
- Slightly agree
- Agree
- Strongly Agree

Q46 I can talk to about my goals

- Strongly disagree
 - Disagree
 - Slightly disagree
 - Slightly agree
 - Agree
 - Strongly Agree
-

Q104 If you are reading this item, please mark “1 Strongly Disagree”.

- 1 Strongly Disagree
 - 2 Disagree
 - 3 Neutral
 - 4 Agree
 - 5 Strongly Agree
-

Q47 This next section will ask you about your experiences with organizations on campus. We will ask about organizations you may be a part of, and about your experiences in these organizations.

Q47 What are some organizations on campus you belong to, if any? These can include academic clubs, frats, leadership positions, ethnic organizations, political organizations, academic orgs like EOP and STARS, etc.

Q48 Do you feel that these organizations have supported you socially during your time at UCSC? Why or why not?

Q49 Now that you've told us a bit about the organizations you've participated in, please rate using 1(Strongly disagree) to 5 (Strongly agree) to assess how supportive you felt these organizations were to you

Q50 I have received helpful assistance from a teacher or tutor from a college organization when I felt I needed such help.

- 1(Strongly Disagree)
- 2 (Disagree)
- 3(Neither agree nor disagree)
- 4(Agree)
- 5(Strongly Agree)

Q51 I have access to a mentor who can offer me advice and encouragement.

- 1(Strongly Disagree)
- 2 (Disagree)
- 3(Neither agree nor disagree)
- 4(Agree)
- 5(Strongly Agree)

Q54 I have received helpful assistance from my advisor or mentor in my college

organization.

- 1(Strongly Disagree)
- 2 (Disagree)
- 3(Neither agree nor disagree)
- 4(Agree)
- 5(Strongly Agree)

Q55 I feel that there are people like me in my college organizations.

- 1(Strongly Disagree)
- 2 (Disagree)
- 3(Neither agree nor disagree)
- 4(Agree)
- 5(Strongly Agree)

Q56 I have access to a positive role model (i.e., someone you can look up to and learn from

observing) in my college organizations.

- 1(Strongly Disagree)
- 2 (Disagree)
- 3(Neither agree nor disagree)
- 4(Agree)
- 5(Strongly Agree)

Q57 These next set of questions will ask about how you navigate college and how you connect with others through campus. Please rate these questions on a scale from 1 (Not at all

like me) to 6 (Exactly like me)

Q57 I have sought out mentors in school who share my interests.

- 1 Not like me at all
- 2 Not like me
- 3 Somewhat not like me
- 4 Somewhat like me
- 5 Like me
- 6 Exactly like me

Q58 I have succeeded despite barriers to my success.

- 1 Not like me at all
- 2 Not like me
- 3 Somewhat not like me
- 4 Somewhat like me
- 5 Like me
- 6 Exactly like me

Q59 I know how to find resources at my college.

- 1 Not like me at all

- 2 Not like me
- 3 Somewhat not like me
- 4 Somewhat like me
- 5 Like me
- 6 Exactly like me

Q60 Even when presented with obstacles, I am able to access resources at my college.

- 1 Not like me at all
- 2 Not like me
- 3 Somewhat not like me
- 4 Somewhat like me
- 5 Like me
- 6 Exactly like me

Q61 I am confident in my ability to network on campus.

- 1 Not like me at all
- 2 Not like me
- 3 Somewhat not like me
- 4 Somewhat like me
- 5 Like me
- 6 Exactly like me

Q55 These next set of questions will ask about how you maintain in your college aspirations. Please rate these questions on a scale from 1 (Not at all like me) to 6 (Exactly like me).

Q62 I have pursued my goals despite barriers to my schooling.

- 1 Not like me at all
- 2 Not like me
- 3 Somewhat not like me
- 4 Somewhat like me
- 5 Like me
- 6 Exactly like me

Q63 I believe that my dreams for my future are possible.

- 1 Not like me at all
- 2 Not like me
- 3 Somewhat not like me
- 4 Somewhat like me
- 5 Like me
- 6 Exactly like me

Q64 I am hopeful for my future

- 1 Not like me at all
- 2 Not like me
- 3 Somewhat not like me
- 4 Somewhat like me
- 5 Like me
- 6 Exactly like me

Q65 I consider myself an ambitious person.

- 1 Not like me at all
- 2 Not like me
- 3 Somewhat not like me
- 4 Somewhat like me
- 5 Like me
- 6 Exactly like me

Q66 Even when I have limited resources (e.g., finances), I find ways to secure the essentials for my education (e.g., tuition, books).

- 1 Not like me at all
- 2 Not like me
- 3 Somewhat not like me
- 4 Somewhat like me
- 5 Like me
- 6 Exactly like me

Q67 I am confident in my ability to get through struggles in college.

- 1 Not like me at all
 - 2 Not like me
 - 3 Somewhat not like me
 - 4 Somewhat like me
 - 5 Like me
 - 6 Exactly like me
-

Q1 College students can have both positive and negative feelings about themselves. Please tell us how much you agree or disagree with each of the following items. If a statement doesn't apply to you, just choose 0. There are no right or wrong answers, we just want to know what is true for you. If you have trouble choosing between the numbers, just choose the number that applies to how you usually feel. Remember, if you strongly agree with a statement, choose a 4 for that item. If you strongly disagree with a statement, choose a 1 for that item. If the statement does not apply to you, choose a 0 for that item.

Q68 I feel that I am a person of worth, at least on an equal plane with others.

- 0 Does not apply to me
- 1 Strongly disagree
- 2 Disagree
- 3 Agree
- 4 Strongly agree

Q69 I feel that I have a number of good qualities.

- 0 Does not apply to me
- 1 Strongly disagree
- 2 Disagree
- 3 Agree
- 4 Strongly agree

Q70 On the whole, I am satisfied with myself.

- 0 Does not apply to me
- 1 Strongly disagree
- 2 Disagree
- 3 Agree
- 4 Strongly agree

Q71 I am able to do things as well as most other people.

- 0 Does not apply to me
- 1 Strongly disagree
- 2 Disagree

3 Agree

4 Strongly agree

Q72 I take a positive attitude toward myself.

0 Does not apply to me

1 Strongly disagree

2 Disagree

3 Agree

4 Strongly agree

Q73 All in all, I feel that I am a failure.

0 Does not apply to me

1 Strongly disagree

2 Disagree

3 Agree

4 Strongly agree

Q74 I feel I do not have much to be proud of.

0 Does not apply to me

1 Strongly disagree

2 Disagree

3 Agree

4 Strongly agree

Q75 I wish I could have more respect for myself.

0 Does not apply to me

1 Strongly disagree

2 Disagree

3 Agree

4 Strongly agree

Q76 I feel useless at times.

- 0 Does not apply to me
- 1 Strongly disagree
- 2 Disagree
- 3 Agree
- 4 Strongly agree

Q77 At times I think I am no good at all.

- 0 Does not apply to me
- 1 Strongly disagree
- 2 Disagree
- 3 Agree
- 4 Strongly agree

Q78 My friends make me feel that I am a valued person.

- 0 Does not apply to me
- 1 Strongly disagree
- 2 Disagree

3 Agree

4 Strongly agree

Q79 I have high self-esteem.

0 Does not apply to me

1 Strongly disagree

2 Disagree

3 Agree

4 Strongly agree

Q1 Below, you will find a set of statements about your confidence being a college student . After each statement, please use the follow scale 1 is VERY UNTRUE for you to 7 is VERY TRUE for you. There are no labels for 2-6 for this questionnaire. Remember, there are no right or wrong answers, we just want to find out what's you feel is true for you

1. I know how to schedule my time to accomplish my tasks.

1 VERY UNTRUE, 2,3 4, 5,6, 7 VERY TRUE

2. I know how to take notes.

1 VERY UNTRUE, 2,3 4, 5,6, 7 VERY TRUE

3. I know how to study to do well on tests.

1 VERY UNTRUE, 2,3 4, 5,6, 7 VERY TRUE

4. I am good at research and writing papers.

1 VERY UNTRUE, 2,3 4, 5,6, 7 VERY TRUE

5. I am a very good student.

1 VERY UNTRUE, 2,3 4, 5,6, 7 VERY TRUE

6. I usually do well in school and at academic tasks.

1 VERY UNTRUE, 2,3 4, 5,6, 7 VERY TRUE

7. I find my university academic work interesting and absorbing.

1 VERY UNTRUE, 2,3 4, 5,6, 7 VERY TRUE

8. I am very capable of succeeding at university.

1 VERY UNTRUE, 2,3 4, 5,6, 7 VERY TRUE

Q99 We are now at the last part of this survey, and just want to know how likely you feel you'll get through college

Q88 I keep on going when my education gets tough.

1 Not at all like me

2 Not much like me

3 Somewhat like me

4 Very much like me

Q105 People describe me as someone who can stick at a task in my education, even when it

gets difficult.

- 1 Not at all like me
- 2 Not much like me
- 3 Somewhat like me
- 4 Very much like me

Q106 Even if it's difficult to understand, I will read an entire book until I "get" it.

- 1 Not at all like me
- 2 Not much like me
- 3 Somewhat like me
- 4 Very much like me

Q107 Setbacks in my education do not discourage me.

- 1 Not at all like me
- 2 Not much like me
- 3 Somewhat like me
- 4 Very much like me

Q108 Even if something is hard in my education, I will keep trying at it.

- 1 Not at all like me
- 2 Not much like me
- 3 Somewhat like me
- 4 Very much like me

Q109 I tend to face my fears in my education.

- 1 Not at all like me
- 2 Not much like me
- 3 Somewhat like me
- 4 Very much like me

Q110 Even if I feel terrified, I will stay committed to my education until I have done what I need to do.

- 1 Not at all like me
- 2 Not much like me
- 3 Somewhat like me
- 4 Very much like me

Q111 I stay persistent in my education even when I am scared of things.

- 1 Not at all like me
- 2 Not much like me
- 3 Somewhat like me
- 4 Very much like me

Q112 If I am worried or anxious about something related to my education, I will do or face it anyway.

- 1 Not at all like me
- 2 Not much like me
- 3 Somewhat like me
- 4 Very much like me

Q113 If something is scary in my education, I will do it anyways.

- 1 Not at all like me
- 2 Not much like me
- 3 Somewhat like me
- 4 Very much like me

Q114 In my education sometimes I find myself continuing to do something, even when there

is no point in carrying on.

- 1 Not at all like me
- 2 Not much like me
- 3 Somewhat like me
- 4 Very much like me

Q115 In my education sometimes I will keep doing the same thing over and over, but I believe that it is normal to do so.

- 1 Not at all like me
- 2 Not much like me
- 3 Somewhat like me
- 4 Very much like me

Q116 In my education I will keep trying at something, even if I know my actions are worthless.

- 1 Not at all like me
- 2 Not much like me
- 3 Somewhat like me
- 4 Very much like me