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Ву

Sergio Martinez

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University of California, Berkeley

Committee in charge:

Professor Kurt C. Organista, Chair
Professor Adrian Aguilera
Professor Kris Gutiérrez

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Abstract

What is Mediating Academic Persistence in Latinx Community College Students? Exploring Student Support Programming

by

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This dissertation explores academic persistence among Latinx students at City College of San Francisco (CCSF), using cultural-historical activity theory (CHAT) to emphasize the culturally-mediated nature of goal directed human activity. The study investigates factors related to persistence within the context of CCSF's Metro Transfer Program (Metro), a student support program (SSP), including Latinx-relevant subconstructs and related questions, to explore what is working and potential areas of improvements within Metro. Structured in-depth interviews with Metro staff and Latinx Metro enrolled students were conducted to assess how the SSP supports persistence.

Findings reveal significant constraints related to lack of Latinx staff and a dedicated academic counselor within Metro. Metro's effort to build a personalized sense of family and community is recognized by students as supporting their persistence. Other standout findings include Metro students and their parents pushing back against stereotypic Latinx gender roles, underscoring sociocultural norms actively evolving within the context of family acculturation and the pursuit of higher education. Concerningly, findings reveal constraining tensions on the part of Central American students that feel erased in a predominately Mexican student college and greater environment (i.e., lack of representation in Chicano studies courses and even reports of being bullied by Mexican peers in locally shared neighborhoods).

Study's findings highlight the critical need for culturally responsive student support programs to address the unique and diverse experiences and challenges faced by Latinx community college students. Metro is well positioned to implement such programming. By doing so, Metro and other support program can improve persistence and success rates by fostering a more inclusively supportive environment that engages the diverse backgrounds and experiences of Latinx students.

To Mom, Dad, Mis Carnales, Chris, and Adriel

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Introduction

Academic persistence is a critical factor in the field of education, referring to a student's ability to continue and succeed in their educational endeavors despite facing various challenges and obstacles. This concept is particularly significant in higher education, where students often encounter a range of academic, social, and personal hurdles that can impact their progress and completion rates. Persistence is not merely about staying enrolled; it encompasses maintaining satisfactory academic performance, engaging with the college community, and utilizing support services effectively. In community colleges, which serve a diverse and often underserved student population such as Latinxs, understanding and fostering academic persistence is essential for improving graduation rates and ensuring equitable educational opportunities. These institutions play a vital role in providing access to higher education for many students who might not otherwise have the opportunity to pursue post-secondary education. Factors influencing academic persistence can include complex and varied ways students learn and engage with the world (Gutiérrez and Rogoff, 2003), institutional support systems, and broader socio-economic contexts.

Research on academic persistence often focuses on identifying predictors of student success and retention, such as academic preparedness, motivation, engagement, and the availability of support programs. Student support programs, which are structured initiatives aimed at helping students achieve their educational goals, provide additional resources and guidance to those who need them. These programs aim to address students' unique needs, helping them navigate college complexities and overcome educational barriers. When effectively designed, they can create smaller learning communities that embrace the diverse skill sets students bring.

Thus, the purpose of this study is to explore academic persistence among Latinx students attending City College of San Francisco (CCSF); predictors associated with academic persistence and college success are explored in relation to CCSF's Metro Transfer Program (Metro), a student support program (SSP). Both Metro staff and participating students are interviewed regarding ways in which they perceive this SSP to support persistence as well as ways in which it could be improved. Further, Metro's internal relationships with relevant collegewide entities (e.g., Counseling Department) are explored regarding ways in which they support and enable as well as possibly constrain this SSP. Data from these two sources are triangulated to better understand persistence in Latinx community college students at CCSF utilizing Metro. Metro within CCSF is selected as a case study because it is located within a federally designated and funded Hispanic Serving Institution (HSI) (i.e., a higher learning institution with at least 25 percent Hispanic students at the end of the award year immediately preceding the date of application). Further, it has a large diverse Latinx population (9,237 of 35,529 students) with several satellite centers throughout San Francisco.

Despite a proliferation of SSPs such as Metro at CCSF and other community colleges over the decades, Latinxs still lag in completion and transfer to four-year colleges. For instance, Latinx students (5.6%) transferred below the college average transfer rate (9.8%) for the 2016-

17 cohort of transferred students to four-year institutions (*SEA Data Tables*, 2022). When compared to their non-Latinx White (11.4%), Asian (13.5%), Black or African American (8.6%), Native Hawaiian or Other Pacific Islander (10.7%) counterparts, Latinx students are least likely to have transferred during that same cohort year. This research justifies the importance of studying academic persistence as a socially mediated accomplishment rather than an individual one, especially given the changing demographics within the Latinx population. It is crucial to explore how Latinx cultural factors (e.g., background, views on education, gender roles, career and educational goals) influence college persistence and how student support programs (SSPs) can effectively serve this dynamic population. By doing so, Latinx socioeconomic status (SES), health outcomes, and labor skills are likely to improve significantly.

Data were collected from structured interviews with key informants that included current and recent student participants in Metro, as well as Metro staff. These key informants were interviewed about their perceptions of and activities within Metro, as well as about factors associated with academic persistence (i.e., cultural and social contextual factors), that may enable and constrain college success (e.g., the role of career goals, key support persons, Latinx ethnicity and gender roles), as documented in the literature. Interviews with Metro staff also explored relationships between this student support program and relevant campus personnel and programs that may enable or possibly constrain the goals of Metro to support persistence in Latinx community college students.

Guiding Theoretical Framework

A cultural-historical activity theory (CHAT) framework is used to center culture (center culturally-mediated nature of human activity) while analyzing institutional practices, in this case an SSP within a community college designed to support the persistence of Latinx students. Specifically, Metro is situated within CCSF's Office of the Vice Chancellor of Student Affairs (VCSA); a key vision of the VCSA is a commitment to holistic student development and equitable access to socially just student learning experiences. As part of several adjacent learning communities and SSPs, Metro collaborates with and shares students with some of these SSPs. Exploring the social nature of learning (Gutierrez & Rogoff, 2003) in these collaborations and relationships in relation to academic persistence was an area of focus of this study.

CHAT offers researchers a multi-dimensional and systemic approach that considers both cognitive motives and tools, as well as the always-present dynamics of power, culture, and history playing out in complex activity systems where, in this case, Latinx students, along with their lived experiences and social skills, interact with SSPs and where SSPs in turn interact with the greater community college campus system (Foot, 2014). As such, CHAT can be used to help identify artifacts (i.e., tools and signs) that college programs have in place in their day-to-day operations, protocols, and procedures (or should consider having), with which Latinx students, equipped with their own personal and cultural tools and cognitive signs (i.e., repertoires of practice, see Gutiérrez and Rogoff, 2003), attempt to navigate. This would help us to understand the affordances and constraints of particular tools.

The following section reviews the literature situating persistence factors in relation to SSPs as an approach to identifying barriers to academic persistence among the 21st century community college Latinx students. Next, the dissertation offers an explication of CHAT's explanatory powers to elucidate relationships between systems and for purposes of this study, SSP and collegewide entities utilized by Latinx students, including how culture plays a role in academic persistence. A short clarification regarding how culture is conceptualized throughout this study: As mentioned above, repertoires of practice is a framework for understanding how individuals draw on a diverse set of experiences and skills acquired through participation in various cultural activities. Following this section, the purpose of this study is refined along with guiding research questions. Next, a methods section offers an overview of the study design, participants and procedures, and analysis of qualitative data plan, to address this study's research questions, and sub-questions reflecting sub-constructs of interest.

Review of Literature

The Need to Improve Persistence in Latinx Community College Students

Although Latinx students are the largest group attending community college in the U.S., they are the least likely to continue to completion or to transfer to four-year institutions in comparison to their Non-Latino White (NLW) counterparts (Crisp et al., 2015; Reddy & Sigueiros, 2021). Now more than ever, higher education is needed to stabilize and ascend SES. If disparities in college completion between Latinx and their non-Latino White counterparts continue or worsen, Latinxs will continue to experience poor social mobility and continue to be over represented in poverty (Creamer, 2020). For instance, according to U.S. Census data, among U.S. Latinxs 25 years and older, only 16 percent have earned a bachelor's degree or higher, the median Latinx household income is \$49,010, and 19 percent live in poverty (Zambrana et al., 2021). Comparatively, among NLW 25 years and older, 34.5%, more than double, have earned a bachelor's degree or higher, their median household income is \$68,145, and less than half or 8.7 percent live in poverty (Bureau, 2017a, 2017b). Yet, Latinxs are attempting to access higher learning as a potential means to improve their SES. In California specifically, Latinxs constitute the largest racialized ethnic minority across two-year public institutions. For example, Latinxs make-up 44% of all students at two-year institutions compared to NLW (36%) and Asian (11.6%) students (Ma & Baum, 2016).

Notwithstanding numerous efforts to improve Latinx educational attainment, the 2017-2018 report from the California Community College Chancellor (2019) shows that Latinx students lag in 3-year completion rate (22.3%) when compared to their NLW (36.4%) and Asian (48%) counterparts. Warranting further investigation, this problem may be even more farreaching among growing Latinx communities in California because progress towards closing the educational equity gap is hindered by a lack of disaggregated data for more granular analysis of Latinx subgroups. Empirical data indicate that Latinx academic needs may vary significantly between Latinx subgroups as result of differing rates of acculturation and national origin and first-generation status as a college student.

A preliminary step is for colleges to begin to collect granular data for Latinx subgroups so that current interventions can be better evaluated that often are one-size-fit type models. For example, a (re)design of complex student support services, matriculation processes and better evaluation of academic interventions could serve a more diverse group of Latinx students. With a proliferation of student support programs (SSP), and some wrap around support services within their programming, SSPs might help to (re)distribute academic resources to fit the varying needs of the 21st century Latinx student. Greater levels of academic persistence among Latinx students would potentially lead to an increase in both the number of skilled graduates and scholars transferring to four-year institutions, thus increasing the likelihood of more positive health outcomes, higher earnings, greater civic participation, and a better educated and skilled Latinx workforce (Contreras & Contreras, 2015; Zambrana et al., 2021; Rowan-Kenyon et al., 2016).

Defining Academic Persistence

Adding to the complexity of the problem of low persistence among Latinx community college students is the ambiguous way institutions operationalize and measure academic persistence. This often focuses on individual accomplishments rather than socially mediated ones such as institutional and curricular policies and practices. In this study, persistence, which is related to learning and academic success, is viewed as a socially mediated versus a solely individual accomplishment involving collaboration, interaction, and support from others. As Gutiérrez and Rogoff (2003) point out, these achievements are influenced by historical and social contexts, relationships, and cultural practices.

Understanding the dynamic and culturally situated nature of learning is important in moving from deficit-oriented explanations of students' success. For example, Gutiérrez and Rogoff (2003) explore the dynamic and culturally situated nature of learning, challenging traditional views of learning that often overlook the importance of cultural context and social interaction in educational settings. They challenge traditional views that often overlook the importance of cultural context and social interaction in educational settings. They argue that learning should be understood through the lens of repertoires of practice, emphasizing that individuals draw on diverse experiences and skills acquired through participation in various cultural activities. From this perspective, it is not as useful to focus on what Juan does not know about mathematics and literacy, for example. It is much more productive to understand what Juan's history of involvement with math and literacy are, that is, their repertoires of practice. Not only does this provide a more expansive view of what Juan knows but also provides an important guide for providing supports, as well as designing robust programs of support.

Additionally, the authors assert that traditional educational paradigms, which focus on individual traits, as in the case of Juan above, fail to capture the richness of students' learning experiences; experiences that can be leveraged in the service of more expansive forms of learning. Instead, they propose that learning is inherently social and deeply embedded in cultural contexts (i.e., it is mutually constituted by the available tools, the practices in which one participates, and the social context of development). This approach highlights how cultural

practices and social interactions shape learning processes, suggesting that educational environments must consider these factors to support student success effectively. Gutiérrez and Rogoff's (2003) work underscore the importance of viewing learning, in this case, academic persistence, as a socially mediated process, influenced by historical and cultural practices, and emphasizes the need for educational systems to adapt to the cultural and social realities of diverse student populations.

Student support programs and community college systems that offer mediating tools to support Latinx students in achieving their career and college goals are best suited to address the diverse and complex needs of these students. These mediating tools must align with the diversity and complexities of the students' ways of learning to be truly effective. Thus, understanding persistence as a socially mediated accomplishment emphasizes the importance of systemic support in fostering student success. As SSPs and community college systems act as mediating tools (and offer particular tools such as tutoring, small learning communities, etc.), they can play a crucial role in addressing the multifaceted nature of persistence and underlying factors associated with college success. This complex role is rarely, if ever, considered in how different institutions measure and define academic persistence in varying manners.

For example, the National Student Clearinghouse Research Center (NSCRC) measures academic persistence by the percentage of students who return to college at any higher educational institution for their second year (Persistence & Retention, 2021). Meanwhile the California Community College (CCC) system defines academic persistence as the maintenance of continued enrollment for two or more semesters and/or completion of a degree/certificate or transfer to a four-year college. It does not mention more than this or about diverse ways of learning. Although the terms retention and academic persistence tend to be used interchangeably in the research literature, college districts describe retention as interventions and policies that help retain students from one semester to the next at one specific college.

Underlying these operationalized terms are factors of academic persistence that predict student success outcomes and educational attainment, including internal and external elements related to the classroom or college campus that either enable or constrain persistence (Kimbark et al., 2017). Similarly, the phenomenon of non-persistence can be characterized by students' motives for abandoning their studies and the degree to which this decision was voluntary (Behr et al., 2020, p. 616). As Behr and colleagues (2020) highlight in their comprehensive literature review on non-persistence, financial distress and other personal circumstances, as well as more attractive job opportunities, can inhibit a student from continuing their education. Additionally, a mismatch between college design, programming, and the skills and experiences some students bring may also contribute to non-persistence.

Despite most definitions of academic persistence focusing on individual skills, this study expands the concept to include Latinx ethnicity, considering the diverse and heterogeneous practices and experiences of Latinx students. It explores how career aspirations, gender roles, and supportive experiences contribute to the repertoire of skills influencing student decisions that affect academic persistence as defined by CCC. Henceforth, this case study, situated within CCSF, uses the CCC definition of academic persistence while acknowledging that persistence is

also a socially mediated accomplishment. It proffers that academic persistence is a form of learning that considers a full range of shared and variable practices and experiences. With the increase of a diverse Latinx student body and lower transfer rate, it is crucial to recognize persistence as a socially mediated achievement rather than solely an individual one. This broader perspective justifies the need to view persistence in the context of social interactions and support systems, acknowledging that students' success is influenced by their community and historical involvement with the academy.

Application of Cultural-Historical Activity Theory (CHAT)

Cultural-historical activity theory (CHAT) is a broad and robust theoretical framework used in the current study because of its explanatory power to understand mediated and collective agency within evolving and complex institutional structures. Cultural-historical activity theory is based on the notion that higher cognitive functions are necessarily mediated by artifacts (i.e., signs and tools) (Hardman, 2015). Further, because CHAT centers culture in its analysis of social problems affecting different race/ethnic groups, it can be used to identify motivating reasons why people enter activity systems (e.g., higher education, SSP, tutoring center) and whether they persist or not. As Gutiérrez and Rogoff (2003) posit, individuals develop a broad array of practices through their participation in different cultural communities and activities. Although there is regularity among groups such as Latinxs, that is, they share similar cultural practices (e.g., share a language, traditions, etc.) there is significant cultural variability in how people and groups' learn and perform tasks. It suggests that learning is influenced by cultural contexts, giving individuals access to diverse, culturally grounded ways of thinking and acting. They stress that individuals are often members of multiple cultural communities, each providing different opportunities for learning. These communities can include family, school, neighborhoods, work and peer groups among others. Thus, people are directed towards activities and goals in the world that may meet their needs or interests (Hardman, 2007).

For this study, employing these notions allows one to study objects that motivate Latinx students to pursue higher learning, enroll in college or to join a SSP. However, as Hardman (2007) points out, objects are not restricted to material objects (e.g., a diploma, transferring to a four-year university); socially and culturally determined properties also have an objective existence (e.g., ideations of hard work, taking care of family, ideations of gender norms and perceptions of what it means to be successful). Understanding why Latinx students enter community colleges in high numbers might be better understood by investigating their motivating objects to enroll in the first place, and then comparing these to the contents and objectives of SSPs and larger college entities more generally.

Part of a family of sociocultural theories, cultural historical activity theory (CHAT) is steeped in the philosophy of Lev Vygotsky and his student Alesksei N. Leont'ev and is an increasingly popular paradigm for research in education (Lee, 2011). Developed over the past century, it is rooted in psychology, anthropology, sociology, as well as historical and linguistic traditions (it is transdisciplinary). As Cole (1998) posits, CHAT encompasses the conditions and activities associated with one's social network (i.e., social ecology), including family structures, home life,

neighborhood, and work environment. Understanding how these conditions and experiences influence Latinx sense-making—the process by which people give meaning to their collective experiences—in the classroom and whether they participate in student programming can be elucidated within a CHAT approach (Cole & Engeström, 1997).

Moreover, the same analytical lens used to explore Latinx culture and social experience can also be applied to a college community and SSPs. For instance, Langemeyer and Roth (2006) argue that while CHAT encapsulates systemic interrelations of practice, such as those between SSPs and larger college departments (known as activity systems in CHAT parlance), little attention is given to "investigating how subjects, by their actions, are confronted with societal structures (like power relations)" (p. 39). Cultural historical activity theory scholars theorize that it is the intertwined engagement between people and structures over time that shape institutional programming and actors within them (e.g., collaborative partnerships, student groups, student representatives on various college committees, faculty senates, Board of Trustees, central college departments, college districts and state level college districts). Furthermore, academic structures and practices are historically shaped by people who previously worked, taught, and learned within a community college at one level but by policies and intermediaries locally and historically. While continuously shaping activity systems, dialectical thinking embodies the notion that cognition and culture constitutively influence development (Cole, 2010; Cole & Engeström, 1997; Langemeyer & Roth, 2006; Qureshi, 2021; Vygotsky, 1978).

Grounded in dialectical thinking, CHAT considers the individual and environment together, mutually constituted, and postulates that human consciousness is co-created through participation in overlapping programs or activity systems (Qureshi, 2021). Hence, why for this study, the focus is on the interrelationship between college entities (i.e., CCSF departments, support programs/staff, faculty, peers, institutional agents), Metro and Metro students to explore how such relationships shape student programming to meet the needs of students or whether it is perpetuating a type of status quo that may be constraining academic persistence. Nice!

As a sociocultural theory, CHAT can help unlock insights in areas where educational change and research experience weaknesses. One area is the failure of educational research not fully analyzing the context in which Latinx students live, work and play, and how their cultures and communities have evolved over time. In the context of cultural-historical activity theory (CHAT), context is not seen as merely a backdrop or container that surrounds an activity. Instead, CHAT theorists view context as an integral part of the activity itself, where both the context and the activity mutually influence each other. This interaction is dynamic and reciprocal, although not always symmetrical, meaning that the influence of the context on the activity and vice versa can vary in intensity and direction (K. Gutiérrez, personal communication, July 13, 2024). A CHAT approach aids in learning and analyzing the relationship between what humans think and feel and the activities in which they engage in everyday life (Vygotsky, 1978).

Through these processes of everyday engagement with the social and cultural environment, humans learn to mediate tasks by using artifacts (e.g., tools and signs) to help complete them.

In other words, artifacts used for mediating an activity are premised to be human psychological processes bound up in forms of behaviors in material tools or instruments (e.g., hammers, pictures, gestures, and vocal sounds), corresponding signs (e.g., meanings and values), incorporated into human actions and modified over generations as a means of regulating human interactions with the world (Cole, 2010).

Utilizing CHAT can help historicize social problems and structural conditions that mediate people's lives, and culturally how people have come to see who they are, who they have become and can become (Gutiérrez & Jurow, 2016). Are community colleges and their respective programs within them embracing these notions and conditions of a growing diverse Latinx community? Cultural historical activity theory scholars posit that people act out their histories as they interact with activity systems. Presumably they draw on the artifacts and tools that they learned in their homes, neighborhoods and during their K-12 experiences in the case of college students as well as in the larger society.

Using CHAT as an analytic tool enables researchers to posit that artifacts (e.g., tools and signs) students use to mediate activity systems can both enable and constrain progress in obtaining the motivating object of that system (i.e., to graduate, obtain a degree, job skills). For instance, students receiving Pell grants or financial aid (tools that mediate persistence as well as graduation and transfer by offsetting costs) may not be aware that accumulating withdrawals or low scores in their coursework may eliminate their future aid packages or may prevent them from meeting transfer requirements. Learning that they may no longer qualify for financial aid, can be an additional constraint or what some education scholars refer to as counter-momentum friction (Wang, 2017) that results in Latinx students reevaluating their career goals and altering their persistence patterns by withdrawing from required courses or pausing their educational plans (e.g., stop out) to figure out future directions. Frictions or perceived barriers (e.g., ideations that prevent students from persisting or limit the value of continuing in a specific activity system) are areas within the educational activity system that can both hinder and constrain persistence for Latinx students.

Thus, students are likely to continue to engage and negotiate persistence in college if: (1) their projected futures are such that they can see themselves benefiting by doing so, and (2) if the mediating tools and signs, while attempting to complete the tasks of graduation or transfer, are enabling their progress towards persistence-related goals (the opposite of countermomentum frictions).

With the above overview of CHAT as a theoretical framework in mind, the subsequent sections will review persistence factor literature most relevant to this study followed by outcome evaluations of two Latinx relevant SSP case studies, one of which is Metro or the SSP studied in this dissertation.

Documented Persistence Factors in Latinx Students

Research suggests that a complex set of factors are associated with academic outcomes and college success for Latinxs. Part of the complexity in the literature is the use of mixed language

to operationalize college success, including terms such as educational attainment, persistence, attrition, retention (Alfonso, 2006; Carales, 2020), academic continuity and momentum (Wang, 2017). Collectively, the literature suggests that students tend to succeed educationally when they intend to persist and when educational institutions provide services to retain them until they complete their requirements, thereby lowering attrition. Crisp, Taggart, and Nora (2015) conducted a systematic review of literature on factors related to Latinx college success. Their findings provide a useful starting point for reviewing Latinx-relevant persistence factors, which include: (a) select sociocultural characteristics; (b) beliefs, ethnic/racial identity, and coping styles; (c) pre-college academic experiences; (d) internal motivation and commitment; and (e) interactions with supportive individuals. The breadth of these factors is consistent with CHAT which allows for even broader analysis of relevant persistence factors in relation to student social interactions in college spaces, classrooms and their immediate communities.

Although not all the articles in Crisp et al.'s (2015) review consider Latinx individuals as a heterogeneous group with shared histories and practices, and despite not specifically naming the disaggregation of Latinx or considering repertoires of practice, they recommend future research to understand how social and institutional contexts shape Latinx skills and ways of knowing. Additionally, this review is significant because it intentionally examines factors that overlap with the activity systems of interest in this study, such as Metro and college entities. Their review identified 62 peer-reviewed articles, 38 percent of which focused on community colleges and included empirical studies that used quantitative or qualitative methods to understand and/or test relationships between one or more variables and college academic outcomes among Latinx undergraduate students. It is presumed that only a choice set of persistence factors can be operationalized into an educational SSP. Thus, this dissertation selectively reviews those most relevant to Latinx community college students that may or may not be integrated into student support programs. Additional key articles published after Crisp et al.'s (2015) systematic review are also reviewed and synthesized in the next section to better grasp documented persistence factors for Latinx college students.

Interactions with Supportive Individuals

A considerable amount of qualitative and quantitative evidence suggests that Latinx students' interactions with individuals who provide various types of support contribute in meaningful ways to their academic performance and persistence decisions (Bordes et al., 2006; Cortez & Castro, 2017). Relatedly, community colleges differ from 4-year institutions in that professors have less pressure to research and publish and can focus more on pedagogy and other collegewide initiatives such as mentoring to improve academic persistence. Connecting with such supportive individuals, or what Cortez and Castro (2017) refer to as transfer or institutional agents or individuals (e.g., faculty, student support advisors, counselors, program managers, peer mentors), can provide Latinx students with understanding and navigating academic and bureaucratic processes related to successful transfer. Such key individuals appear to be beneficial in various ways within institutional contexts. They play key roles in guidance, mentorship, and advocacy. More importantly, several qualitative studies suggest that Latinx

students tend to encounter transfer agents through their participation in student support programs (Arana et al., 2011; Barajas & Pierce, 2001; Padilla & Arellano, 1996) that help them cope with the college environment (Cortez & Castro, 2017). In addition, interactions with transfer agents are correlated with increased student success and intentions to persist among Latinx students (Tovar, 2015 as cited in Castro and Castro 2017).

Latinx students seem to benefit from institutional/transfer agents (Jimenez, 2012; Tovar, 2015) because such students tend to be a socially interdependent group (Tibbetts et al., 2018) that often leans on family (i.e., familismo) and adjacent community members to navigate unfamiliar circumstances (Bordes et al., 2006). Although initially some students, such as first generation (FG) may be hesitant to ask for help, once confianza (trust) has been established (Llopart & Esteban-Guitart, 2018), they are likely to depend on transfer agents for informal and formal guidance and mentorship. Because institutional/transfer agents may work within student support programs, they are likely to be familiar with systemwide procedures and have strong relationships with staff from collegewide student service departments. These relationships help institutional/transfer agents understand nuance processes and facilitate students' access to various services (i.e., financial aid, tutoring, and student support programming).

Yet, more importantly, institutional/transfer agents, such as peer-educators, program staff, and dedicated faculty and counselors within a student support system, are typically well-informed about transfer and graduation procedures and requirements. When these individuals share similar backgrounds and communities with the students, it helps build stronger relationships and meaningful connections. In other words, students might see themselves, or at least a relative, in them.

Using the CHAT framework, an institutional/transfer agent, such as a Metro staff person, can lessen frictions and tensions that an FG or new student may experience without direct guidance and mentorship. Institutional and transfer agent guidance might take the shape of identifying for the student how their repertoire of practices, cultural capital and background funds of knowledge (i.e., knowledge and skills developed outside of an educational setting, see, Moll et al., 1992) can be used to navigate rigid and structured procedures between the various college activity systems (e.g., academic departments, financial aid offices, library services, student affairs). For example, community college students, including Metro students, are required to meet with an academic counselor to develop initial educational plans during their first semester of college as part of their graduation and transfer prerequisites.

To support this process, an institutional/transfer agent, with formal and informal knowledge of favorable faculty teaching styles can help generate a list of transferable courses before a student meets with a counselor based on student experiences, interests, past work histories and personal goals. In so doing, the student is not solely depending on an academic counselor, despite the counselor's role and intention to support the student, to offer a list of courses without considering nuanced information regarding faculty teaching styles and informal

teaching evaluations but also matching the course selection to specific student experience and nuanced interests. Patterns of enrollment, often linked to courses taken, has important implications for persistence, thus why having insider knowledge to help explain and demystify such things as teaching practices and guidance of course selection is vital (Tovar, 2015).

College Experiences and Financial Resources

In addition to K-12 preparation for college, the research literature describes finances and related money issues as major contributors to impeding academic success among Latinxs. Financial aid, full-time college attendance, and employment are major factors associated with college success and persistence (Crisp et al., 2015). The type of financial aid students' received was also substantially related to academic persistence. Federal Pell grants had a significant impact on whether students opted to stay in school or not (Chen & Desjardins, 2010). Findings from three national samples of Latinx students also suggest that attending full time is positively associated to both persistence and degree completion rather than attending college part-time (Alfonso, 2006; Arbona & Nora, 2007; Nora, 1990). In addition, college grade point average (GPA), as one might expect, was found to be positively related to Latinx students' decisions to remain in college (Crisp & Nora, 2010; Hu & St. John, 2001).

Crisp and Nora (2010) also found that enrollment in remedial courses was positively related to persistence and degree completion among 2-year Latinx students. In contrast, Alfonso (2006), using an older version of the national survey data that Crisp and Nora used, found that remedial courses decreased the odds of 2-year completion. Although it may be difficult to determine the exact reasons for the conflicting evidence, it is worth noting the growing Latinx population and the potential changes in cultural and social practices that accompany this growth. These changes could include increased language skills, greater representation in media and politics, and enhanced access to relevant information. From a CHAT perspective, humans evolve and develop new tools and artifacts to mediate social life (Wolff-Michael & Yew-Jin, 2007). As a result, culture is continually evolving and deeply embedded in the everyday practices and learning experiences of individuals. This includes utilizing and benefiting from support services like Metro and others offered at CCSF.

For example, individuals and communities adapt to their environments by creating and utilizing tools—both physical and symbolic—to navigate and influence their social contexts. In the context of education, support services like Metro at CCSF have the potential to serve and complement student lived experiences and practices with crucial mediating tools that help students manage and overcome academic and personal challenges. These services provide resources, guidance, and a supportive network that enable students to persist and succeed in their educational journeys. By leveraging these tools, students are better equipped to navigate the complexities of academic life, fostering resilience and enhancing their chances of achieving their educational and career goals.

Internal Motivation and Commitment

Drive to succeed was the most salient characteristic related to academic success among successful Mexican American college students studied by Padilla & Arellano (1996). Although Padilla and Arellano (1996) only focused on a small sample of Mexican Americans of varying years in the U.S., their findings offer more insight into Latinx parents as an influential motivating factor for succeeding in undergraduate studies. Highlighted is a difference in how Latinx parents value and exemplify the importance of an education as compared to NLW parents. Students in this small study (N = 30; n = 15 male, n = 15 female) claimed that their parents were very involved, in their own way, in their education. Most of the respondents' parents had less than or the equivalent of a high school degree yet expressed high aspirations for their students to accomplish in school what they were unable to accomplish. It could be argued that all youth benefit form parental involvement and support, yet these low SES parents seem to desire more scholastic opportunities for their children in the U.S.; which speaks to how familismo changes in response to life and new opportunities in the U.S.

Padilla and Arellano (1996) assert that despite uniform agreement that their parents placed emphasis on educational achievement, and provided support and encouragement, there were also salient differences among parents. For Latinx parents with higher educational attainment, messaging regarding a college education seemed more as a likely and natural expectation. However, for parents with less than a high school degree, the messaging was more abstract and broader. For instance, some respondents reported that their parents wanted them to experience the American dream or that they did not want their children to work in labor intensive jobs. Exploring family-related cultural motivating factors among Metro students is an area of focus in this study.

It is worth noting, as discussed by Gutiérrez and Rogoff (2003), cultural practices exhibit both regularity and variance. Regularity arises from the established, enduring practices within a cultural group, providing a sense of continuity and shared understanding. However, there is also variance as individuals adapt, modify, and create new practices in response to changing contexts and personal experiences. This duality acknowledges that while cultural practices have stable elements, they are also dynamic and subject to change, reflecting the fluid and evolving nature of culture. Which might explain the contrasting findings in acculturated Latinx families with higher education experience compared to parents with high school level educations.

Other areas of inquiry are derived from evaluations outcome studies of SSPs serving Latinx community college students, including Metro.

Outcome Evaluations of Student Support Program (SSPs) Serving Latinx Community College Students

To further inform the current study, this section highlights two foundational SSPs, as case studies of community college persistence interventions targeting Latinx first year students: The Metro Transfer Program, the focus of the current study, as well as the Accelerated Study in Associated Program (ASAP). These SSPs are reviewed because they have been evaluated and discussed in the literature as effectively addressing barriers by embedding factors associated with persistence into their curricula, program procedures, faculty training curriculum and counseling services. Considered robust, they offer wraparound and long-duration services to historically underrepresented minorities and have been shown to improve persistence and success in graduating and transferring Latinx students at higher rates (data presented in subsequent section) than students not enrolled in their programming (Cormier et al., 2020; Love et al., 2021; Weiss et al., 2019).

Metro Transfer Program

Metro is a SSP that integrates wraparound student services into the classroom and programming and has been peer-reviewed in the literature. The purpose of the Metro study was to evaluate an academic support program that aims to improve persistence and graduation for lower-division students who are low income, first generation, and/or underrepresented. To this end, they compared outcomes of Metro students who received the Metro intervention with a matched comparison group of students from the same institution who did not. Guided with the research question: Do Metro students demonstrate higher graduation rates at the end of 4, 5, and 6 years in college and higher GPAs? And does participating in Metro result in higher gains in persistence?

The study researchers also measured milestones towards graduation: (1) completion of developmental coursework and (2) persistence into sophomore, junior and senior years. Results from their binary logistic regression revealed a statistically significant difference in persistence between Metro and comparison groups with Metro students showing less frequency of attrition (11.05% vs. 22.68%) and greater frequency of persistence (88.95% vs. 77.32%) than the comparison group (Love et al., 2021). Their study yielded statistically significant evidence of higher persistence for Metro students versus the comparison group.

Metro, as an SSP, operates within an open access community college, that accepts applications throughout the year. It was created with an overarching goal to develop an intervention that offers students services within a singular program and physical location; mostly because empirical evidence suggests that ad hoc interventions or services/programs that are disconnected from required coursework are less likely to be utilized by new students (Cormier et al., 2020; Love et al., 2021; Tovar, 2015). Some of the resources Metro provides students with are a fully staffed resource room that includes computer stations, free printing, peer-mentors, and tutoring services, and a place on campus to hang out and form a sense of community.

Furthermore, program designers developed a curriculum that is linked and scaffolded between selected transferable courses (i.e., First Year Experience course or FYE, English,

communication, and math) as part of Metro scaffolded papers, a high-impact practice for FYE courses that has proven to retain students (Thomas et al., 2021). In other words, students in the FYE course work on a research topic related to educational inequity and use the same paper in their English course. These components were developed with the intention of motivating students to engage course materials relevant to their lives as one way to increase academic persistence.

Metro's principle aim of increasing persistence is indirectly supported by using a cohort model (cohort model research indicates that student experience increases sense of community and academic and social integration) and by wrapping around services into a singular program (City College, 2017; Love et al., 2021; Thomas et al., 2021). It currently serves FG (57%) and URM (77%) students, 90% in need of remediation (Smith, 2018). The cohort model groups newly enrolled students into a sequence of core Metro-related courses over four semesters. Metro, in collaboration with several academic departments (i.e., Communication Studies, English, Mathematics, Interdisciplinary Studies, Political Science), and the Office of Counseling also identifies courses that are transferable to each department (i.e., courses taken prior to transfer that have been vetted and approved by four-year universities).

Research shows that linking courses increases student success and lowers attrition (Levin et al., 2009; Love et al., 2021; Thomas et al., 2021) by creating a more integrated and supportive learning environment. Linked courses, often part of learning communities or pathways, promote stronger connections among students and between students and faculty, which fosters a sense of belonging and engagement (Thomas et al., 2021). These linked courses typically feature coordinated assignments and shared themes, making the learning experience more cohesive and relevant (Love et al., 2021). Consequently, students are more likely to stay motivated, persist in their studies, and achieve academic success.

Metro's philosophy, which aligns with current research on increasing persistence, is such that new URMs are integrated into the social environment by establishing trustworthy and meaningful and supportive relationships with Metro staff (Hoyt, 1999). To accomplish this, new students are required to enroll in Metro's FYE course: Interdisciplinary Studies College and Career Success (IDST 50). In the literature, similar courses are known as student success courses (SSC) that are part of first year experience programs which together have shown promise in increasing persistence among FG college students who complete them (Kimbark et al., 2017). Besides curricula that teach how to succeed in college and best practice study habits, students also build community with faculty teaching the courses who often have additional Metro program roles; thus, having and building networks of support mediates their college-going experience.

Metro's FYE course is taught by Metro coordinators which allows for relationship, confianza or trust, and rapport building between Metro staff and students. Coordinators work with and continuously support their cohort of students until they graduate or transfer. Metro coordinators average a caseload of 120-160 students per semester, some students are in their FYE courses while others are further along in their coursework, and coordinators remain in direct communication with all their students.

Metro's modified IDST 50 course is designed for students placing below college-level English and focuses the course's learning objectives to include self-efficacy and transition-to-college identity, factors that increase persistence (Levin et al., 2009). The course also links its students with Metro English and math tutors by having them in their FYE classrooms (Metro Transfer Academies, 2019), another documented factor to increasing persistence (Levin et al., 2009; Malnarich, 2005; Tovar, 2015). Research demonstrates that basic-study skills and learning approaches such as annotation, note taking, mind mapping, and time management, all of which are covered in Metro's course, lead to critical thinking skills that increase the odds of student persistence (Goldstein & Perin, 2008). The current study probes Metro Latinx students to better understand how such program components resonate regarding their academic persistence and overall programmatic experience.

Accelerated Study in Associated Programs (ASAP)

For comparison purposes this second case study is offered to provide additional context to the role of SSPs working collaboratively with other systemwide entities in a similar community college setting. Originally developed by City University of New York (CUNY) in 2007 with funding from the New York City Center for Economic Opportunity, ASAP provides academic, personal and financial supports to low-income Asian or Pacific Islander (8%), Black (36%), Hispanic (43%), White (10%) and other (4%) community college students to help them earn an associate's degree within three years. Recognizing numerous reforms that have attempted to improve community college students' rates of persistence and completion by only including one or two program components, ASAP focused on creating wraparound services in several key areas: students are required to attend college full-time (12 units) and encouraged to also enroll during summer and winter semesters. Students receive frequent advising, enhanced career services, and additional tutoring. Based on evidence from the research literature, ASAP also centers three forms of student financial aid: tuition waiver, free use of textbooks, and a monthly transportation benefit (Weiss et al., 2019).

Weiss and colleagues (2019) also explored whether their findings held up for a variety of subgroups of student participants including Hispanics (using their studies racial category only for citation consistency). Although considered exploratory due to limited statistical power to detect subgroup differences, and because of no prior empirical evidence that ASAPs effects vary by observed characteristics, they concluded that ASAP is nonetheless effective for a wide variety of student racial and ethnic groups. They also reported for all subgroups explored that estimated effects on earning a degree at the three-year mark are large and positive, an indication that ASAP is benefitting students of various background characteristics.

A noteworthy finding is that "for the race subgroups, at the three-year mark there is evidence of variation in program effect with very large positive effect estimates for Black and [W]hite students, compared with the relative smaller (but still large) positive effect estimates for Hispanic students" (p. 274). The authors further explain that the effect estimator at the six-year mark for Hispanic students is near zero, and that it is possible, compared with other students, that Hispanic students do not respond with the same effect to ASAP's model, a

limitation of this study is that Weiss and colleagues (2019) do not speculate as to why this is. It is possible, and an area that will also be explored herein the current study, that specific cultural values and practices played a role in performance. For example, factors such as *familismo* or *Machismo* can shift academic goals to focus more on family need, working and earning or preserving personal pride in response to taking long to graduate. *Familismo* is a central Latinx value involving dedication, commitment and loyalty to family, and *machismo* is a strong sense of masculine pride and expression often reflected in male gendered work responsibilities that can compete with persistence in college. This study aims to dig deeper into Weiss et al.'s (2019) evaluation findings that ASAP has potentially a different effect on Latinxs by asking Metro students about the role of gender and their persistence in college. What are the cultural regularities and variations with regards to sons and daughters attending college?

Outcome Evaluations of Metro and ASAP

Embedding Latinx-related persistence factors documented in the research literature to increase graduation and transfer requirements were evident in both SSP case studies. Through cohort modeling, assigning participants an advisor and mandatory advising, SSPs can build strong relationships with faculty and program staff (e.g., transfer or institutional agents), leading to an array of nuanced support that is consistent with the Latinx value of collectivism and inter-depending on family relationships. By providing what Weiss and colleagues (2019) label *intrusive support*, referring to mandatory counseling and advising with tutors attending SSP courses, students faltering in coursework can receive immediate support. Although the term *intrusive* can have a coercive connotation, because of long-duration contact, small support communities and assigned advisors can enhance harmony between SSP staff and students as reported in the literature in ways perceived as caring.

Furthermore, both case studies provide ample evidence that providing structure (e.g., programming, academic and financial) around enrolling full-time, helps students accumulate graduation and transfer credits at higher rates than students not enrolled in similar SSPs (Cormier et al., 2020; Love et al., 2021; Weiss et al., 2019). Increased time strategically spent on campus, block schedules with cohort classmates, along with long-duration contact with SSP staff also improves Latinx sense of belonging.

To facilitate expedited graduation, Weiss and colleagues (2019) note that low-income FG students need extra incentives and financial supports to counterbalance any lost opportunity costs resulting from spending more time studying than earning wages. For example, even when Pell grant eligible, FG Latinx low-income students often find themselves culturally obligated to provide for their family or household. This often means they need to also be employed while attending community college. Free tuition, extra money in the form of stipends and access to textbooks can counteract financial burdens and help meet household obligations for many Latinx students.

Given the burden for many Latinx students to enter the workforce upon graduating high school, and to maintain part-time employment while pursuing higher education, SSPs need to

restructure their programs to better offset the real and perceived costs of trying to balance part-time work and education, including developing new financial tools to help Latinx students mediate their intertwined academic and external life experience. Because SSPs constitute smaller support learning communities, within the larger community college, they are in a unique position to teaching the short, medium, and long-term benefits of investing in a college education which can help Latinx students to persist. As of the publishing of this evaluation study, Metro has moved into CCSF's OSE and is receiving additional operational support. This study is focused on further exploring this new interrelationship and how factors associated with academic persistence are affected.

Both SSP case studies provide evidence to suggest that the chances of Latinx students graduating and transferring increases by wrapping graduation and transfer requirements within a singular program (Cormier et al., 2020; Love et al., 2021; Weiss et al., 2019). By wrapping graduation/transfer requirements around SSP participation, students are more likely to adequately explore intended majors, apply to transfer on time and meet all the academic requirements before graduating. First Year Experience courses within SSPs, as demonstrated in both case studies, are ideal in promoting and incorporating graduation and transfer information within their curricula. A redesign of current SSPs that includes packaging both academic and college requirements allow for demystification of the various rigors associated with meeting graduation conditions and transfer articulations (e.g., courses that are accepted for credit at the receiving four-year institution). Hence why, this study explores influential relationships between Metro and college entities.

Tensions and Frictions within and between Student Support Programs and College Operations

As such, persistence for Latinxs may be negatively affected by larger community college practices and policies that regulate how SSPs are allowed to operate. These practices are operationalized as administrative regulations that create the standard operating procedures for entities within the campus community. The CHAT paradigm helps to expand the conceptual lens regarding how SSPs and larger community college infrastructures interact by historicizing their development and considering students, faculty and administrators as historical actors (i.e., humans that carry their own historical inheritances). This potentially allows for uncovering how historical policies and procedures have unfairly (and continue to) impact non-dominant groups (e.g., BIPOC, woman, nongender conforming). Whether implicit biases are embedded in the lack of hiring practices to promote more Latinx faculty, staff and administrators, or as Gutierrez and Vossoughi (2010) assert, as institutions, schools have a long history of de-privileging and de-historicizing cultural practices and neglecting the funds of knowledge of non-dominant communities. A cultural-historical approach helps to consider past, present, as well as implications for future orientations, practices, knowledges, and experiences for both the consumer of the community college (e.g., Latinx students) but more importantly, the systems, practices, and activities within such colleges.

People, through their everyday practices live out their histories as they engage activities with various systems. If a Latinx student's history with educational institutions is marred with difficulty and challenges, program administrators and designers would benefit by

understanding salient aspects of the historical backgrounds of Latinx prospective students. Knowing their history of involvement with school, math, literacy, everyday practices would better create programming and academic spaces that welcome and account for these diverse repertoires. More importantly, educational researchers, administrators, policy makers and students, as historical agents, play important roles in making transformative changes to infrastructures and long-standing practices in community college systems. As Gutierrez (2018) argues, "historical actors (Espinoza, 2003) can become designers of their own futures by invoking the past in order to re-mediate it so that it becomes a resource for current and future action" (p.96). For example, if SSPs can offer relevant tools for Latinx students to analyze how decades of under resourced schooling have marginalized their communities, it could be enough to compel some to persist to completion and, in turn, remediating their future outcomes.

Cultural historical activity theory scholars refer to the above tensions and frictions as double binds (Gutiérrez et al., 2019). A key premise of the CHAT framework is that activity systems (e.g., smaller student support programs and larger college operations) are characterized by constant internal and external contradictions (Engestrom & Young, 2001). As such, URM students may experience such double binds when participating in student support programs or by merely attending a community college (e.g., first generation college student). Gutierrez (2018) points out that how people observe, discern, or perceive have a historical dimension. Thus, for underprepared Latinx students and FGs, they may not be willing to access required tutoring services or attend teacher office hours for fear of feeling or being labeled as "dumb" by teacher or peers. But this historical perception is informed by many students" persistent placement in remedial programs or "tracked" into lower-status academic tracks. The fact that a student is hesitant to enter a space that triggers past negative experiences creates a contradiction given the structure and labeling of the space (e.g., tutoring center or remediation course). It is important to underscore that a student that is hesitant to enter such a space is drawing on their repertoire of practices regarding institutional navigation and coping with potentially stigmatizing interactions.

Other contradictions between SSPs and larger community colleges include programs that hire outreach and recruitment staff, including peer mentors, familiar with course prerequisites and pathways to transfer and graduation, but official approval of these pathways can only be granted by college academic counselors. This creates a disconnect between the support provided by SSP staff and the formal requirements enforced by academic counselors, potentially leading to confusion and delays for students navigating their academic journeys. Counselors and college administrators often question or remind student support managers that such advising can only be conducted by authorized academic counselors, often creating frictions/tensions with Metro staff and outreach teams. Such contradictions have the potential of limiting programming and services to students thereby constraining their progress.

However, contradictions are not always constraints and can "represent more than just problems or dilemmas as experienced by [students and college personnel]; rather they can also reflect and influence structural elements and tensions that cause the system to adapt, flex, change and innovate, potentially leading to what Engeström identifies as expansive learning"

(Edmond & Melvin, 2014, p. 8). Such auspicious contradictions or tensions can disrupt sub-optimal standard practices and create the need for students and administrators to find creative and responsive solutions to entrenched problems. Pacheco (2012) defines such contradictions as everyday resistances.

Pacheco (2012) asserts that Latinx college students enact a set of political actions and practices to negotiate the demands of politically charged community spaces. Collectively, Latinx students learn to develop coordinated and strategic challenges to particular social and educational policies, "they engage in joint sense making, problem solving, and social analysis" (p. 121). Thus, another related guiding question of this dissertation is whether Latinx students who experience poor grades, discrimination, financial burdens or lack of mentorship and guidance from key educators (whether in K-12 or in community college) are strategically opting out of higher education to enter the workforce as a form resistance or to pursue careers and trades such as construction (e.g., electricity, cement work, plumbing? For example, it may be possible that funds of knowledge used to mediate one system (e.g., K-12) do not apply in a different system (e.g., community college), and given the flexibility and potential to be creative, how can SSPs create new artifacts/tools to mediate academic success among the most vulnerable Latinx students?

As such, this study explores persistence in Latinx community college students more deeply by asking key informants what they consider most helpful, as well as what needs improvement. Presumably informants are drawing on their repertoires of practice and lived experiences. Structured interviews with Metro students and staff are used to explore, as well as ask about many of the risk factors reviewed in the above sections as specified next.

Purpose of Study

The purpose of this qualitative study is to explore persistence in Latinx community college students by conducting an in-depth inquiry into Metro and Metro staff, to elucidate ways in which they may support and enable as well as possibly constrain persistence. The following two primary research questions, as well as 4 sub-questions reflecting further constructs of interest, were used to guide the purpose of this study:

- 1. In what ways do student support programs enable or constrain academic persistence in Latinx community college students?
 - a. Latinx ethnicity & Persistence
 - i. As a Mexican American/central American identified Latinx student are there ways in which Metro leverages your cultural histories and practices?
 - ii. What is it like to be Central American in a predominantly Mexican/Chicano campus?
 - b. Gender Norms & Persistence
 - i. What are the expectations of Latinx families participating in the study regarding college?
 - ii. In what ways are gender norms related to students' persistence and college decisions?

- c. Key People & Persistence
 - i. Who has supported persistence?
- d. Career goals & Persistence
 - i. How do career goals impact your persistence in the program?
- 2. What are the relationships between student support programs and wider college personnel and programs that enable or constrain the academic persistence of Latinx students?

Method

Study Design

This study used a qualitative exploratory case study approach to explore the Metro Transfer Program, a student support program at City College of San Francisco (CCSF). This analysis involved structured qualitative interviews with key informants, including Latinx Metro students and current and former Metro staff, aiming to address the two primary research questions above along with four related sub-questions addressing constructs of interest also outlined above.

The exploratory case study approach, guided by a cultural-historical activity theory (CHAT) approach, investigates patterns concerning the academic persistence of Latinx students utilizing the Metro program. Additionally, the analysis considered various factors contributing to persistence documented in the literature, including Crisp et al.'s (2015) review of the literature regarding their comprehensive summary of qualitative and quantitative evidence specific to the factors related to Latinx student academic success outcomes during college, as well as outcome evaluations of Metro and Accelerated Study in Associate Programs (ASAP). The factors explored in this study included Latinx student background factors, Metro-related program factors, as well as relationships between Metro and college entities related to Metro's efforts to support Latinx student persistence.

Participants & Procedures

To address the research questions, the initial plan consisted of recruiting three types of interrelated samples of key informants: first- and second-year Metro students, current Metro staff, and one or two relevant CCSF administrator working in programs relevant to Metro and identified by Metro staff as particularly influential to their support program. These interviewees were chosen because they offer diverse perspectives on the Metro program's effectiveness, providing insights from direct beneficiaries (students), implementers (staff), and influential institutional collaborators (administrators). However, the final recruitment consisted of 14 of the 24 planned Metro student participants (see Table 1), all 5 Metro staff, but no CCSF administrator(s) interviewed as previously planned. While recruiting and interviewing Metro staff proceeded smoothly, student recruitment proved to be very challenging for several reasons, including lack of response to an email invitation to participate in study sent by Metro staff, and lack of response to subsequent emails sent by the researcher to further solicit

participation. Prioritizing student recruitment took precedence over recruiting the small planned administrative sample.

The initial pool of Latinx students emailed are from cohorts that began Metro in the years of 2012 to 2020 (more detail below). Presumably a large portion of these students were not actively checking their college emails. The few that did respond to the recruitment invitation had either dropped out from Metro or CCSF, stopped out (term used by college administrators to describe a student that temporarily withdraws from enrollment) or had graduated and/or transferred for a 4-year college. Moreover, subsequent classroom invitations by the researcher, as well as by a Metro staff member, also yielded few responses, necessitating other strategies described below.

Sampling Frame for Metro Students. With aid of the Metro manager, a spreadsheet of all Latinx Metro students entering Metro between the years of 2012 to 2020 was generated inclusive of background ethnicity, gender, their personal and school email addresses, and year they entered Metro. Prior to the researcher contacting Latinx students from the list, the Metro manager sent them an email introducing the researcher, purpose of the study, incentives to participate (i.e., \$40 Amazon Gift Card) and researcher's contact information if interested. Next, the spreadsheet of names was sorted by year students started in Metro to sample first- and second-year students. Students starting prior to 2019 were excluded and students starting in 2019 and 2020 were prioritized. Given that many Metro students remain in community college beyond the second year, nine of the 14 students recruited were second year or beyond (see Table 1), including two that had transferred to four-year universities. It was decided to include these students in the sample given their extensive experience with Metro and persistence at CCSF.

Table 1Planned Purposive Sample of First- and Second-Year Metro Students (in Parenthesis) and Actual Sample Obtained

Year in Metro	Female		Male		N=14
	Mexican	Central American	Mexican	Central American	
1 st	4 (3)	0 (3)	1 (3)	0 (3)	n= 5
2 nd or beyond	3 (3)	4 (3)	1 (3)	1 (3)	n= 8
Total	7 (6)	4 (6)	2 (6)	1 (6)	(14)24

As noted above, a purposive sample of twenty-four participants, stratified by year in Metro (first, second or beyond), gender (male, female), Latino ethnicity (Mexican, Central American) was planned to address the research questions and to increase the possibility of saturation. However, because of the obstacles to recruitment also described above, the actual obtained sample of Metro students totaled fourteen (see Table 1). As such, limitations to this study include the lack of male participants (n=3) compared to female participants (n=11) and

number of Central American identified participants (n=5) compared to Mexican identified participants (n=9).

Using an excel spreadsheet, tabs were created for each year (i.e., 2019, 2020) and all the names from the original list were separated into their respective years. Names in each tab were listed in alphabetical order and associated with an excel spreadsheet number. Following this, the range of numbers from the spreadsheet were entered into a random number generator to systematically generate random numbers for selecting the planned purposive sample and filling the cells in Table 1.

The initial spreadsheet containing student names and emails, along with the randomly generated list of names from cohorts 2019 and 2020, were transferred and securely saved in Box, an online storage database with encryption, on a password-protected computer. Following IRB protocols and informed consent procedures, interviews were conducted and recorded using Zoom, a cloud-based video conferencing platform, to make interviews more convenient for all participants in the study. An added advantage of Zoom is that it also generates a transcript of each interview. After the interviews, all participant recordings were renamed with a unique deidentifiable tag and saved to Box and deleted from Zoom. To analyze each transcript, each was edited for clarity, and copied into Dedoose, a cloud-based software application designed for organizing and analyzing qualitative research data (see Analysis of Data section below).

A structured interview guide, designed to address the research questions and subquestions, was used to interview Metro students who were asked close-ended questions about what they found helpful about Metro, with regards to academic support and persistence, as well as what could use improvement (see Appendix A). Sub-questions were similarly queried. For instance, Metro students were asked if attending CCSF was linked to any specific career goal. To elicit detailed and descriptive responses, open-ended prompts were also utilized as needed to delve into specific topics and gather additional information. For example, as a follow-up to the above question, participants were often prompted with, "What type of work do want to work in?" to further explore their goals in relation to attending CCSF.

Concerning ethnic background, Latinx participants were prompted with the question, "As a Mexican American/Central American identified Latinx student, are there ways in which Metro includes your cultural background?" with subsequent prompts about Metro staffing, course assignments, and the Metro resource room (i.e., a large, remodeled classroom that serves as Metro's tutoring room, student workspace and lounge). Additionally, one of the subquestions of this study focused on potential tensions between Mexican/Chicano identified and Central American identified students. Consequently, a prompt specifically directed to Central American students asks, "What is your experience like as a Central American on a predominantly Mexican campus?"

Sampling Frame for Metro Staff: Convenience sampling was used to invite all Metro staff to participate in structured qualitative interviews addressing the second research question as well as the additional sub-questions of interest. Before recruiting and inviting Metro staff to participate, they were briefed on the study details during a Metro staff meeting by the Metro

manager. They were informed that their participation was voluntary, and the researcher sent emails inviting each to participate, which included the purpose of the study, incentives, and an informed consent document.

It is worth noting that the Metro staff briefing occurred at the end of the spring semester and recruitment and interviewing began late fall. During the interim period one Metro staff member transitioned out of Metro. It was determined to keep them in the study because of their years of service in Metro and their historical CCSF knowledge were deemed valuable for this study. A parallel structured interview guide was used to interview staff (see Appendix B) to address the second research question and sub-questions.

Metro staff were asked to describe their role in Metro and to share their official Metro title. Next, Metro staff were prompted to discuss Metro's strengths and areas in need of improvement with regards to supporting Latinx persistence. Metro staff were also queried about relevant relationships Metro has with relevant CCSF personnel and programs and prompted to discuss how supportive or unsupportive these relationships are for supporting Latinx persistence. In addition, Metro staff were also probed with, "What are other factors you would like to share?"

Lastly, Metro staff were asked to speculate about what they believed Metro students would say in response to the questions and sub-questions outlined in the Metro student interview guide. For instance: I am interested in learning about the ways that student support programs such as Metro support or even constrain Latinx persistence. Tell me what you think Latinx Metro students will say to the following areas:

-Do you think Latinx students are attending CCSF to complete any type of career goals? Tell me what you think.

-What do you think the Mexican identified student might say about whether or not Metro includes their cultural backgrounds (e.g., Mexican, Central American, etc.) in its programming and activities.

Analysis of Qualitative Data

The analytical framework, based on documented Latinx-related persistence factors from Crisp, Taggart, and Nora's (2015) systematic review, helped create questions for two sets of structured interview guides (i.e., for Metro students and Metro staff) used to conduct structured qualitative key informant interviews addressing the study questions and subquestions.

Post interviews, transcriptions were reviewed, cleaned and edited. In addition, Memos were used to capture researcher observations, interpretations and reflections (e.g., engaged study sub-questions/constructs and recorded researcher thoughts, feelings, biases assumptions, noted participant demeanor, physical background, noted where interview was conducted, etc.). Next, transcriptions and researcher memos were loaded into Dedoose for analysis. Codes were defined using the same constructs from the two main research questions, sub-questions, as well as from CHAT. A preliminary data review was conducted to gain a broad

understanding of the constructs covered within transcription narratives. Following this step and drawing on qualitative coding techniques, a hierarchical coding frame was developed to categorize data by creating coding tiers. Then top-level and mid-level codes were created and inputted into Dedoose. To illustrate this process, the following excerpt is taken from a transcription, where a second-year Mexican male participant is describing his experience with Metro's tutoring services (e.g., coded as SV-Tutoring where SV=service, see complete code thesaurus in Appendix D):

"I only went to [Metro] tutoring sessions. I thought they were really helpful because they were really nice, and where they really helped [me] were with [my] classes, and they really cared for their students, you know. And that's something that I needed. I needed encouragement."

The participant describes his Metro tutoring experience; thus, it is coded with the top-level code, SV-Tutoring, and because it gives details of enabling his academic persistence, it is also coded with the mid-level code of SV-EN (i.e., SV-EN is equivalent to Metro tutoring service that enables persistence). This process was used to develop each code in the code thesaurus and the overall hierarchal coding frame.

Human Participants and Ethics Precautions

Ethical approval. This study was conducted in accordance with the ethical standards of the institutional review board (IRB) of University of California, Berkeley which approved the research protocol (Protocol ID 2023-11-16891). Prior to the commencement of the study, the research proposal was reviewed to ensure that it complied with ethical guidelines regarding human subjects' research.

Informed consent. All participants were provided with an informed consent form detailing the purpose of the study, procedures, potential risks, benefits, and their rights as participants (see Appendix C). This form also included information about confidentiality, the voluntary nature of participation, and the right to withdraw from the study at any time without penalty. Participants were sent the informed consent before their scheduled interviews and were verbally consented at the onset of their interviews.

Findings

Findings for the first overarching research question (i.e., In what ways does Metro Transfer Program enable or constrain academic persistence in Latinx community college students?), as well as the second overarching research question (i.e., What are the relationships between Metro Transfer Program and wider college personnel that enable or constrain Latinx student academic persistence?) are organized into two major sections: Persistence-Related Enabling Factors and Persistence-Related Constraining Factors.

Both major sections are further organized into subsections: Student-Related Factors and Metro and Intra-Institutional Factors. Student-Related Factors are aspects more directly linked to students themselves, mentioned either by students or Metro staff, that either enable or

constrain their persistence. Metro and Intra-Institutional Factors refer to aspects more directly related to the Metro Transfer Program and its relations with relevant CCSF entities, such as other SSPs and college departments and programs, that either enable or constrain Metro's efforts to support persistence.

The four sub-questions, designed to address the four constructs of interest, related to the first overarching research question, are highlighted throughout the organizational framework below but only to the extent that they arise from the data in informative ways (i.e., frequently mentioned, mentioned by both students and metro staff, offer special insights, etc.).

Persistence-Related Enabling Factors

Student-Related Factors

Participants questioned about gender-related expectations and attending college revealed that students are not primarily interested in starting families or entering traditional Latinx paths such as marriage where woman manage households, raise children and husbands work to provide for the family. Instead, particularly female respondents, expect independence and are primarily focused on their careers and education. Using the thesaurus code book to systematically scan the data the following quotes describe dynamically changing Latinx gender roles:

"They [her parents] always said to me, 'you're not gonna be beautiful forever'. But you [do] gotta build your brain. So, they [consistently] told me, keep building your brain, get that degree. And you'll be fine, you won't have to depend on nobody. Become an independent woman" (second-year Central American female, first generation).

The persistence enabling messaging conveyed by Latinx parents to their daughter in this study aligns with the literature, particularly with the findings of Padilla and Arellano (1996) who observed that parents with less than a high school education tend to convey support for higher education in more general terms. While the current study did not specifically inquire about parental high school levels, all participants (N=14) reported their parents having less than a post-secondary experience. The participant here noted that their parents encouraged pursuing a college degree by emphasizing intellectual development (e.g., build your brain) over physical appearance (e.g., "you're not gonna be beautiful forever"), thereby supporting independence and reducing reliance on others, such as a partner (i.e., a husband).

Similarly, in this next quote, a Central American female student explains how her father, despite still adhering to traditional gender norms—such as conventional ideas regarding domestic responsibilities and behavioral expectations for males and females—held more progressive and evolved views on education.

"My dad's still pretty traditional minded [when it comes to gender norms]. But I will say in terms of education, he's been very progressive, him and my mom came to the States, and they didn't get an education. So, they really valued that for me and my siblings so they were never like [participants name] you could never do higher education. You need to focus on finding a husband or anything like that, it was more if you want to do that, we're willing to support you,

and I'm one of 3, and I was probably the only one that was serious about having a higher education." (second-year Central American female, first generation, one of three siblings, immigrant parents).

The quote highlights how the participant's parents, despite adhering to traditional gender norms, are placing a high value on education due to their lack of educational attainment and opportunities in the U.S. for their children. Their progressive stance on education is evident as they encourage and support their children, including the participant, to pursue higher education without emphasizing traditional gender roles such as finding a husband. Yet, besides not pressuring her or her siblings, the support was limited to encouragement. As a first-generation student the burden of navigating college is left to her as well as responsive student support programs.

The following quote suggests that Latinx students are self-conscious about how others might negatively perceive them. Despite being a minority in the classroom, the following student responds with pride about positively representing Latinx students.

"When you or I don't feel good, or don't feel confident with ourselves, we can think that other people might be sensing that. Or you might think that people don't want to work with you because of that. For me, I guess I was just confident because I know that is not true. I knew I belonged to that class. I guess there was also pride like, oh, I'm representing for the Hispanic community being in these spaces and performing well and helping other Latinxs." (second-year Male Mexican, immigrant parents, first generation).

This participant captures what some other participants have only alluded to: feeling like a minority often leads to opting out of classes for fear of being perceived as less capable. However, this student finds pride and motivation to succeed because of this challenge. Of the 14 participants, this is the only student expressing pride as a Latinx in a classroom or the Metro tutoring space.

Metro and Intra-Institutional Factors

Triangulation was achieved by corroborating interview data from both Metro staff and students: when probed about what Metro services worked well in addressing academic persistence among Latinx Metro students, both Metro staff and students mentioned Metro's tutoring services, specifically the tutors and the resource room. Metro's tutoring and other program services are held within the resource room that is central to Metro's small learning community environment space. The Metro tutoring space is described by 11 out of 14 student participants as welcoming, as well as by all 5 Metro staff who refer to it as a key feature of Metro supporting students. The following quote depict the most significant benefits of Metro's small learning community, which seem to help some students voice their concerns as well as counter potential academic constraints:

Here, a Metro staff person describes an interaction between a Metro tutor and two Metro students, highlighting the nuanced nature of the resource room. This space serves students beyond usual academic support, acting as a place for students to relax and debrief their academic experiences. In this case, the strong relationships between Metro staff and students allow students to rely on these connections to navigate and make sense of challenging situations.

"A Latinx student was sharing with the Metro tutor a discussion in her Metro-related course and how she did not agree with how the professor was portraying Latinxs living in America in their lecture. Then another [Metro female] student, who was sitting nearby and listening, started to share her ideas [about that same lecture] and began highlighting cultural Latinx differences.....including how whitewashed the lecture seemed and how she [Metro student] found it in her to tell the professor that she did not agree with how they were explaining her experience in America." (Metro staff member who witnessed this exchange between the two Latinx students and another Metro staff person).

The Metro space is fluid and dynamic, enabling students to share academic persistence relevant issues that might not be discussed elsewhere. The friendly and familiar faces of tutors, peer educators, and Metro coordinators/advisors help build *confianza* (trust), enabling students to share sensitive situations that could constrain their persistence.

To build rapport, one Metro tutor openly shares that staff is like family and acknowledges the challenges of learning and engaging in learning environments, emphasizing that with effort, they can navigate these challenges together.

"I try to instill the idea that we are a family here. We're a community. So, we should all be together in our learning and our struggles... reach one teach one" (Metro staff).

When asked how students receive his "we are family" message, he shares:

"it's funny because at first, they [students] laugh. But I kid you not, a couple of hours later they are all laughing [together] as if they are best friends and sharing each other's contact information" (Metro staff person who primarily works in the resource room).

Students seem to be highly cognizant and sensitive to the friendly and welcoming vibe and structure facilitated by the Metro staff in the resource room. The following quote illustrates how this participant has learned to navigate and apply her own repertoires of practice to specific contexts:

"...it's nice to know that [Metro] tutors are around. I'm somebody that doesn't like to go up to people and ask for help. I'm very shy... [plus independence] was something that was enforced on me since I was little. I had to learn how to do stuff on my own. So, it's helpful to have Metro tutors in this program that are extremely understanding and can help with [my] homework" (first-year Mexican female, first generation, immigrant parents).

Some students, like the participant above, heavily rely on Metro tutoring to mediate their learning and persistence. As a shy person, it is crucial that she feels comfortable and genuinely supported by the tutors. This is evident in her use of "very" to describe her shyness and "extremely" to describe the tutors' "understanding" of her learning needs. These are key enabling characteristics of personnel who provide intensive support to students with different ways of learning.

Small acts of personal connection can have a lasting and significant impact on students with diverse learning needs. As previously mentioned by Metro students, a Metro coordinator also highlights the importance of warmly welcoming and actively engaging students in several aspects of Metro programming and how this influences persistence.

"I know it sounds like something so small. But the fact that we're greeting students by their first name and welcoming them and going into their [Metro] classes trying to get to know them. I think that's a huge piece of our program. I believe that helps students to keep coming back and come into the center [Metro Resource Room]. And I think that has worked this semester" (Metro coordinator).

Persistence, as a socially mediated achievement, involves collaboration, interaction, and support from others. Metro staff actively engage with students throughout the Metro program (e.g., in the classroom and resource room), providing academic experiences that ideally (re)shape and influence their progression on their academic journeys.

Some Latinxs have shared struggles with standardized learning skills, usually individualized such as study habits and time management skills. The next quote highlights how a participant struggled with such learning skills and by engaging with Metro tutors expanded and shifted her ways of learning:

"I was always bad at math, and I remember the first few weeks I started stats, I literally didn't know how to do the homework, and I just wouldn't do it. And they [Metro] have a math lab [Metro tutoring in the resource room]. [I would ask myself], why don't I just show up and then ask for help, I feel like people are scared to ask for help, and I just showed up, and he [the Metro Tutor] helped me with my homework. He didn't make me feel bad that I didn't know what to do. He went over everything and he didn't make me feel dumb. That's when I started going there." (second-year Central American female, first generation).

This participant shares how students, including herself, are often afraid to ask for help for fear of being perceived as dumb, yet when staff practice humility, are thorough and non-judgmental students tend to persist. Still, when the cultural practices of a support program do not align with the students' familiar practices, there is a risk that some students may struggle

with persistence. In this case, the student managed to seek help, possibly because of the inviting environment and non-judgmental qualities that create a sense of belonging. These factors encourage students to show up, even if they lack, they fear being perceived as not smart.

In contrast to the Metro resource room, student participants strongly expressed the significant influence a key staff person of Latinx background can have on student persistence. Another sub-construct explored reveals key insights from students' interactions with a supportive individual from the City Dream program, an adjacent SSP focused on undocumented students. Many Latinx Metro students also participate in City Dream, despite there being no formal collaboration between the two programs. Students mention that having mostly Latinx staff and peers present, along with frequent Spanish spoken, is a key reason why they prefer spending most of their time there rather than in the Metro resource room.

"I just didn't know what direction I had to take and thankfully, at City Dream [a CCSF resource center for all students including undocumented, students from mixed status families, and all students affected by immigration or citizenship issues] there's a counselor named Juanita, and she has helped me a lot. When I took a break from school and when I came back to school, I felt as if I was way behind from graduation, I was lost because I came back not knowing what major I wanted [to pursue] until I spoke to Juanita, and she told me, 'You know what I think, you're stuck. I think you need to figure out what you wanna do. You're taking a bunch of classes. But what is it that you want to move forward with?' So, I talked to a [CCSF] counselor, and I decided on nursing, Juanita helped me out. (first-year Mexican female, first generation, immigrant parents).

Even though this participant is not undocumented, she finds it helpful to seek services at City Dream. For her, the personalized aspects of the program, particularly through Juanita's engagement with City Dream participants, cater to students with experience in multiple communities (e.g., various Latinx backgrounds, first generation status, undocumented, bicultural, bilingual, etc.). Juanita interacts with students in a semi-formal and relatable manner, posing thought-provoking questions to encourage reflection, and disclosing some of her own personal yet familiar experiences. Through this approach, Juanita offers enabling support. Her tough love yet relatable method is intended to help students navigate the rigid procedures of transfer and college success while being seen and understood as Latinx. As a Latinx-presenting female, Juanita likely reminds students of a tía (aunt), mother, or carnala (slang for sister), all of which help establish strong rapport, a sense of belonging, and *confianza* (trust).

The following participant shares why she prefers spending her time in City Dream over Metro, providing more insight into the Latinx ethnicity sub-construct explored in this study:

"This is where people usually come [City Dream] and this place, even though I'm thankfully not undocumented and I don't have to go through all those struggles, but I know a lot of my friends who are, is where I feel the most welcomed. It's where a lot of us speak the same language and can understand each other like our background. This is where I usually spend

most of my time in because we all look like each other, we all identify with each other" (second year Mexican female, first generation, immigrant parents).

The participant's statement underscores the importance of cultural and linguistic affinity in fostering a sense of belonging and community within SSPs, specifically when staff and peers share ethnic backgrounds. The participant's reference to their friends who are undocumented highlights the intersectionality of identity within the space. City Dream appears to serve as a haven for students with diverse backgrounds, not just limited to undocumented immigration status. This intersectional approach can enhance the program's effectiveness by addressing the multifaceted nature of students' identities and experiences. Metro, and other SSPs that successfully foster such environments can significantly impact students' lives, helping them navigate and overcome various challenges they face in their educational journeys.

Persistence-related Constraining Factors

Student-related factors

The following quotes illustrate two unique examples of underlying tensions between Mexican and Central American students, a subconstruct of interest in this study. These tensions arise in neighborhoods and schools where Mexican Americans are the much larger majority. This leads to Central Americans often perceived and treated as Mexican, feeling erased in curriculum about Latinxs that is mostly about Mexicans, and Mexicans bullying Central Americans in their neighborhoods. The first set of quotes highlights nuanced differences between Mexican and Central American students, suggesting a sensitivity specifically for Central Americans when discussing these tensions. This sensitivity may act as a constraint, as Chicano studies classes often emphasize Mexican culture, potentially neglecting Central American topics. Subsequently, approximately one-third (5 out of 14) of respondents described their experiences of being a minority in a specific class, particularly focusing on their sense of belonging. The selected quotes encapsulate the core aspects of this experience.

"I guess that's a touchy subject sometimes. Because Central Americans and Mexicans have their own history. Also, because of the way I've grown up within that experience, it can sometimes be intimidating [as a Central American female]. It's also about how growing up in this [environment] made me more scared [to share my Latinx background]. I did not want to socialize with Mexican American students or have friends, or anything like that. I grew up in the Mission District. The biggest thing that had a major impact on my [thinking about this] was seeing my older brother in that [predominant Mexican/Chicano] environment and what that does to brown kids growing up within that environment, especially because he wasn't Mexican and the discrimination that comes with it (first-year Central American female, first generation).

This quote reveals the complex dynamics of intra-Latinx relations and the impact of cultural and ethnic distinctions within the Latinx community in San Francisco. The participant highlights historical and social tensions between Central Americans and Mexicans in the U.S. Her personal experience of growing up in a predominantly Mexican/Chicano environment in

San Francisco's Mission District led to feelings of intimidation and fear of discrimination, discouraging her from socializing with Mexican American peers. This underscores how ethnic divisions and discrimination within the broader Latinx community can influence identity, social interactions, and a sense of belonging, illustrating the need for more inclusive and nuanced approaches in addressing Latinx identity and heterogeneity in Metro and across CCSF educational settings.

Another important insight into this topic is how the perceived homogeneity within Latinx studies can marginalize some Latinxs with regards to a biased curriculum. The following illustrates a participant's frustration with Chicano studies courses often promoted without addressing the diversity among Latinx students in these classes.

"I would probably just say that is a mess, it's hard. Because people, [her included], often want to take a class that is specific for my culture, [but] I am Central American, and people [CCSF/Metro staff] tell me to take Chicano studies, [but] that's not me. I don't identify that way. That's not my history. I don't claim that. And [those who take that class] have a lot of pride in [those topics]. It's just not for me. I don't feel my stories are being told when I go into those classes. But if you're brown and Central American you're almost always going to be [misclassified as] Mexican. It can be frustrating because it just feels like [only Mexican] culture and history [is covered], and my culture gets erased in the process. I had to deal with [being confused as Mexican] so often. Initially, I would get really angry, and it just fueled into the whole, Central Americans versus Mexico feud." (second-year Central American female, first generation, immigrant parents).

The quote reflects the challenges faced by this Central American participant, and possibly by others, within Metro pathway courses and Chicano studies courses in particular. The participant's frustration highlights several critical issues: cultural misalignment, identity and representation erasure. The participant feels that Chicano studies, while valuable, does not represent her Central American identity and experience. This misalignment creates a sense of exclusion, because such courses do not address or validate her cultural background. The participant's difficulty in finding relevant coursework underscores the broader issue of curriculum design that overlooks diversity within Latinx communities.

Further, the participant's feeling that her stories are not being told and that her culture is erased highlights the impact of a curriculum that predominantly features Mexican culture. This erasure can lead to a sense of invalidation and contribute to a divide between Central Americans and Mexicans, exacerbating intra-community tensions and fueling conflicts, as noted in the participant's reference to the "Central Americans versus Mexico feud."

The next set of quotes builds upon the previous findings by highlighting how cultural erasure closely intersects with sense of belonging and Latinx ethnicity. Such intersections reveal how academic persistence can be enabled when students intersectionally connect with coursework and environments that reflect and validate their human diversity. The lack of representation in academic settings, such as in the limited content of Chicano studies courses,

of lack of Latinx students in STEM courses, can lead to feelings of marginalization among Latinx students as illustrated the subsequent quote:

"But I felt very isolated and very alone in my stem classes, even in Metro when I would ask people what their majors were I was one of maybe two other Latinos that were pursuing: biology or chemistry. Other people were [majoring in] forensic sciences, or public health, and that was great. But they weren't in my chem courses or anything. So, I already knew, going into that, that they would not be in my exact classes. I wasn't gonna see anyone else. And so, I would go into those spaces and feel really lonely. I remember my first semester taking chemistry, I think I was one of the only Latino students in the class. Nonetheless, the only female and I just remember trying to find a random group of brown kids. They weren't Latino, you know, but they were just brown kids, and I just sat with them. And I was like, Okay, cool. Most people in those classes were Asian or white. And we were the little brown kids on the side that were the minority in those classes" (second-year Central American female, first generation).

This quote highlights that despite finding some comfort in connecting with "brown kids" who were not necessarily Latinx, this Latina still felt marginalized given the predominance of Asian and NLW students in STEM classes. This experience reflects broader issues of underrepresentation and the challenges of navigating academic spaces where Latinx students are significantly outnumbered, which can impact their sense of belonging and academic persistence. Metro and other SSPs that offer targeted resources, intensive mentoring, and small learning communities can help mediate these situations. They can do this by preparing students beforehand, creating study groups, and checking in more frequently with Latinx students majoring in STEM fields.

The exploration of gender norms and academic persistence includes sub-questions about the gendered messaging students receive from parents and society and whether this messaging influences their persistence. Many Latinx families adhere to a patriarchal structure where men are seen as the head of household, and women's roles are primarily centered around domestic responsibilities and caregiving. The following quotes illustrate students pushing back against traditional Latinx gender norms, while parents actively grapple with these norms. They aim to support their college-going children, voicing traditional gender roles but to a much lesser degree, thus showing an evolution from traditional expectations.

"I always told him [her father], the reason I refused to learn how to cook was out of the fact that he was so gendered. My dad would tell me, I don't want you to not know how to cook, one day your husband might get upset at you and might hit you or something. I remember looking at him, and would respond, I would never be with a man that would be willing to do that to me (second-year Mexican female, first generation, immigrant parents).

This finding reveals the participant's resistance to traditional gender roles imposed by her father, reflecting a clash between her personal values and the entrenched norm of machismo. The father's insistence that she know how to cook as a means of preventing potential abuse from a future husband illustrates an extreme gendered belief that women must

adhere to specific domestic roles to avoid harm. The participant's rejection of this rationale and her refusal to learn to cook demonstrates her defiance against gendered expectations and commitment to challenging patriarchal norms.

This empowerment can translate into greater academic persistence and motivation. Latinx students who confront and overcome constraining beliefs about their cultural roles and capabilities may experience increased confidence and determination to succeed in their studies. Metro staff and other SSP personnel that understand and address such rapidly changing gendered expectations can further reinforce this sense of empowerment, helping students navigate and persist through such sensitive challenges.

For Latinx male students, *machismo* can also shape and influence how they might persist in higher education. For instance, some students might opt out and pursue low skilled jobs or go after trades. In the following quote, a former Metro student that has transferred to a four-year college, describes the type of gendered norm messaging he received during most of his formative years from his father:

"After graduating high school, I tried community college for a bit but my dad, I feel, was pushing me towards working as an electrician, with my uncles. My dad would say, 'oh, you'll have a good career you can do electrical work'. I felt like I was being pushed the entire time [into a non-educational career], and a lot of my friends went into welding, another one of my friends dropped out and went into plumbing. So, it just seems like we are always being pushed into construction, manual labor, never really in [education]. And these are all real smart people. This is not bad work, but why [aren't we encouraged to] be an electrical engineer instead of just an electrician, in my opinion. I would like more Mexicans to go for that, to strive for more. My whole life, I was told that I was dumb, or that I wasn't smart." (Mexican male Metro student, transferred to UC Berkeley 2023).

This finding highlights the participant's frustration with being steered towards manual labor careers instead of pursuing educational and professional opportunities in fields like electrical engineering. The push towards trades such as electrical work and welding might reflect a broader pattern of lower expectations for some Latinx students not perceived as college capable. The participant's experience underscores how societal and familial pressures can constrain educational aspirations and reinforce negative self-perceptions. This situation emphasizes the need for Metro staff and key mentors to challenge these limiting gender norms, support male students in exploring a wider range of career paths, and highlight the evolving recognition of male students' potential in academic and professional fields beyond traditional manual labor roles.

In the quote below, a Latina participant highlights her autonomy as well as actively changing gender norms and college expectations, by finding motivation to pursue higher education as a personal achievement. Her parents neither expected nor pressured her to attend college, which she appreciates. This lack of parental pressure appears to allow her to

avoid the stress of fulfilling patriarchal expectations such as having children and managing a household.

"In terms of kids, no, I mean, that's never been an issue in my family. I have older brothers, so I expect them to make the next generation, or whatever. I always wanna be financially independent, no matter what, in any circumstance. [But] it's not really an expectation in my household to go to college, [my parents] think it doesn't really benefit you as it did in the past. So, it's better to get work experience, more than education. My parents never went to college so it's not a big deal and my experience in college has affected me in two ways: I see it as a good thing, because the pressure to graduate is not really there. It's a personal thing, I want to be the first in my family to graduate college. But when I do have kids, I will not be pressuring them, either." (second year half Mexican and Central American female).

This finding illustrates a nuanced view of gender roles and educational expectations within the participant's family. Compared to the other female participants, she highlights a unique autonomy in her decision to pursue higher education, driven by personal ambition rather than familial pressure. Her family's focus on work experience over education reflects a pragmatic approach shaped by their own perceptions of the changing value of a college degree. The absence of pressure to conform to traditional gender roles, such as having children, further emphasizes her independence. In turn, lessening added pressures to succeed academically and increasing her chances of persisting in the immediate future.

An important notion of stereotype threat and its relation to Latinx persistence emerged from the data: students are concerned about how staff and peers might underestimate their educational abilities, as conveyed in the following pair of quotes:

"I felt like I wasn't dumb. I wasn't. but I felt like I was dumb. I felt as if I wasn't capable. So, when someone, when a professor anyone treats me that way. Yeah, I'm like, alright, I don't want help from you. I'm gonna go. But it's like this. I know there's so much help here at city college. I must find it. Figure it out." (second year Central American female, first generation, immigrant parents).

This finding highlights the impact of stereotype threat on the participant's self-perception and academic experience. Despite knowing her own capabilities, the participant felt undermined by the negative perceptions of professors, which led her to avoid seeking help. However, her determination to succeed despite these challenges demonstrates her fortitude and underscores the importance of accessible support services. This fortitude is crucial for academic persistence, because it motivates students to seek out and utilize available resources such as Metro and City Dream, even when feeling discouraged by authority figures. Also highlighted is the importance of training SSP staff to probe, question, and support students without furthering notions of academic insecurity likely to constrain persistence.

For example, some students, as highlighted by a Metro tutor, might be avoiding Metro because of ideations of being incapable or fears of being perceived as dumb as in the following:

"There's a couple of reasons [why students don't come to tutoring] stigma. I have had many students tell me, 'I don't' want to go to that guy [tutor or counselor], I just feel dumb. I feel like that. That'll be something [that makes me feel] embarrassed to do'" (Metro staff person).

The stigma of feeling or feeling perceived as "dumb" prevents many from accessing the support they need and constraining academic persistence. Many such students struggle alone rather than benefiting from available resources in the Metro resource room. Addressing and reducing this stigma is essential for creating spaces that welcome all styles of learning, thereby enhancing their chances of academic success.

Metro and Intra-institutional factors

The next set of findings quotes are specific to constraints related to Metro and Intra-Institutional relationships or aspects of programming that can be improved.

As a program that cohort's students into several required Metro-related courses (e.g., Interdisciplinary Studies 50, Political Science, etc.), it is important for Metro to have an assigned academic counselor that can help coordinate the right path for a student's major, assist with course selection, and ensure courses are transferable to 4-year colleges, and meet graduation requirements. Although Metro advisers possess keen insights into various transfer and graduation requirements, they do not have the same access to student educational plans (commonly referred to as ed plans) within the CCSF system as do academic counselors. The following quotes highlight such intra-institutional constraints faced by both Metro staff and students: (this is the kind of set up that would have been helpful for all the other quotes.

"When you talk to them [Metro students], a lot of students are surprised to find out new information, they respond with, "I didn't know that". They might be receiving misleading information from peers or even counselors who might say to them take this fun class. But that class might not count towards anything like a transfer requirement. Students need to be aware of the [educational] timeline. Otherwise, [they] could end up being here 3, 4 years extra years taking classes that they're not passing" (Metro staff person).

This finding highlights a significant programmatic constraint to student persistence: misinformation and lack of awareness about academic requirements. This results in extended time in college and potential frustration, which can hinder persistence. Ensuring that students receive accurate and timely information about their educational timelines and requirements is crucial for supporting their academic progress.

This finding underscores the critical need for an assigned academic counselor within the Metro program to ensure that students receive accurate and consistent guidance. The lack of such a counselor result in students receiving general advice that may not align with the specific requirements of the Metro program, leading to potential missteps in their educational planning. This gap in support services can add confusion and impede academic progress and persistence. The participant's experience below corroborates this Metro staff person's concerns:

"I met with a regular counselor in the beginning of the school year to talk about my ed plan and to talk about what classes I wanted to take and classes I needed for my general ed requirements. But the [counselor] didn't consider that I was also a Metro student, and that I needed certain classes to be part of this program. So, I feel like if there was a Metro counselor, it would help a lot, because if I needed to adjust my ed plan, I could just have them do it and they would know what classes are required of Metro. I feel like that would be a lot of help to just have a specific counselor assigned" (first year Mexican female, first generation).

The participant's quote supports establishing Metro-specific academic counselors to ensure that students receive tailored advice, streamline their academic plans, and ultimately enhance their persistence and success within the program and college more generally.

As described in this dissertation's theoretical framework, *everyday resistances* are auspicious tensions that can disrupt sub-optimal standard practices to create the need for students and administrators to find creative and responsive solutions to entrenched problems as illustrated in this quote:

"One way we address this [not having an assigned Metro counselor] is through our peer mentors, [it] is actually a big one. To be honest, the fact that students are seeing themselves through our peer educators, especially because they share similar experiences, is really helpful, you know, when advising [is done by their peers]. Actually, the advising piece is actually a really important [part of Metro], especially for our first-generation college students" (Metro staff).

This finding conveys the role of peer mentors as an innovative solution to the lack of assigned Metro counselors. By leveraging the shared experiences of peer educators, the Metro program creates a supportive environment that addresses unique academic needs. This also offers a sense of belonging, particularly for first generation students who might otherwise feel isolated and academically insecure. Moreover, this approach exemplifies everyday resistance by challenging sub-optimal standard practices and demonstrating that creative, responsive solutions can effectively mitigate institutional shortcomings. However, while peer mentoring is beneficial, it may not be sustainable given the transience of peers leaving community college for various reasons (e.g., transfer to four-year college, taking a break from school, etc.).

Lack of a Latinx staff within Metro continuously emerged in findings from both Metro staff and students:

"I think they [Metro Latinx students] would say that there's no Latinx staff members currently in Metro. So, I feel like there's a disconnect cause they [Metro Latinx students] can't connect deeply with someone from their background. Everyone's a little bit different, which is a benefit. But you know, sometimes you want to be able to relate to someone at a different cultural level. Metro can't offer that cause they don't have any Latinx Staff members" (Metro staff).

The absence of Latinx staff may create a sense of disconnection and limit the cultural relevance of Metro. While non-Latinx diversity among staff has its benefits, the lack of representation can hinder the establishment of strong rapport and trust that is often facilitated by shared cultural backgrounds and experience. Addressing this gap by hiring Latinx staff members could enhance Metro's ability to meet the unique cultural and emotional needs of Latinx students, thereby advancing a more inclusive and supportive environment that promotes academic persistence.

Potential constraints to academic persistence related to Metro programming emerged from the data analysis. Core themes indicate that Metro strives to meet students where they are through various communication modalities (e.g., guest visits and announcements in Metro-related classes, social media, emails, informational social events in the resource room, and general announcements via community board). However, examination of this study's sub-constructs and questions revealed that not all students are fully aware of Metro's main mission, services, or have a clear understanding of Metro staff roles. Some students were not even aware that they were assigned a coordinator whose job is to stay connected with them, help them stay on track with education plans, transfer and graduation deadlines, and course selection. For example, when probed about having a Metro coordinator to help navigate courses, one student replied,

"I have no idea. I do know I have one [Metro coordinator], but it's not something I've ever accessed, just because I took that one in-person class early in my education, you know. [IDST 50] I think that is what is ... And that's the only time I've been around the Metro coordinator. I feel like it's my fault and Metro's fault because I should have contacted them [to] see what advice they should have given me. But I also feel like Metro should be [better] in telling students who their coordinators are or who can help them, because I don't really know" (2nd year Mexican and Central American female, first generation, immigrant parents).

Here, a student describes why she stopped attending Metro:

"I think one of the reasons why I left was more because of the changes and administrative stuff that was going on when I was a student [there]. There was another person mentor that was in charge [Metro coordinator], and now, there's another one. It's hard. [With] all the budget cuts and stuff that's been going on over there in Metro. So, I'm not even too sure what's really going on, you know. That's one of the reasons why I stop coming [to Metro]" (second-year Central American female, first generation, immigrant parents).

These findings indicate gaps in communication and continuity within the Metro program that can constrain academic persistence. The first student's experience reveals a lack of clear communication about the role and availability of Metro coordinators, leading to missed opportunities for support. The second student points to administrative instability and budget cuts as factors that contribute to disengagement from the program. Together, these issues underscore the need for Metro to improve communication about available resources and maintain stability in program administration to better support student persistence.

Discussion

The purpose of this dissertation study was to explore key factors influencing the persistence of Latinx community college students, enrolled in Metro Transfer Program (Metro), a Student Support Program (SSP). To explore Latinx student persistence within Metro, structured qualitative Interviews with 14 Latinx student participants and five Metro staff participants were undertaken to elucidate both Metro and student related factors associated with enabling and constraining persistence in college. The range of identities that people inhabit, including gendered, ethnic/racial, key supportive people and career related goals. Further, relations between Metro and related college-wide personnel and programs that may enable or constrain Metro's efforts to support Latinx persistence are also explored.

One of the most significant findings, voiced by both students and Metro staff, is the lack of Latinx staff in Metro who might better understand the challenges of being first generation students who have to navigate a range of additional demands: financial, linguistic, academic, racial/ethnic challenges. Despite efforts to create an inclusive and welcoming community space for all students, as confirmed by the data, this did not fully compensate for the absence of Latinx staff member frequently voiced by students (e.g., FYE faculty, coordinator, full-time manager). Not having Latinx staff that interface consistently with students emerged as a persistence constraining Metro-related factor consistent with Crisp's et al.'s (2015) documented college success factors for Latinx students (e.g., Interactions with supportive key people, sense of belonging, and Latinx coping styles which refers to how Latinxs respond to perceived stress). Lack of Latinx staff, ideally of Mexican/Chicano and Central American backgrounds, that might share a history of experiences, constrains an already precarious learning environment for most Latinx students.

An effective way Metro staff enables persistence is by providing customized support—a key feature of Metro's design—through the personalized relationships formed between staff (e.g., coordinators, tutors, and peer mentors) and students. Emerging in the findings, from both staff and students, are relationships between staff and students felt like family. For Latinx students, who often rely on family (i.e., familismo) and community to navigate less familiar and stressful situations, forming such connections can be more challenging with staff from different ethnic backgrounds. Establishing confianza (trust) is no easy task, especially when there are few if any Latinx supportive individuals to help demystify aspects of higher learning and help students to feel represented. All five staff members emphasized the importance of welcoming students, checking in frequently, and learning the first names of all Metro students. As expressed in the quotes from the findings, students felt welcomed by staff who greeted them

and asked about their well-being. However, students also mentioned that this was not enough for them to frequent the Metro resource room because they did not see many Latinxs. Kindness and a genuine sense of care from staff certainly emerged in the data, from both staff and students, yet crucial in any institution that serve vulnerable community members, is representation in supporting a large segment of Metro Latinx students with various needs.

According to Crisp et al. (2015) and Padilla and Arellano (1996), the drive to succeed is one of the most salient characteristics for academic success among Latinx students. This dissertation's findings suggest Latinx students have a high commitment to succeed, indicated by some seeking services outside of Metro to compensate for the lack of Latinx staff and peers. Several participants reported preferring the services of City Dream, an adjacent SSP to Metro with a supportive Latinx staff member, frequent use of Spanish, and the predominance of Latinx peers in its resource room. As indicated in Tovar's (2005) study, a City Dream staff person referred to as Juanita here (not real name) fits the role of institutional agent (i.e., key person), that potentially lessens frustrations experienced in students through guidance, mentorship, and sharing her similar frustrations and successes as a Latinx staff person. Latinx ethnicity and key people, both subconstructs of Research Question 1, highlight the need for Latinx representation among staff to enhance persistence. By increasing Latino staff, Metro can provide more key resource people for Latinx students similar to how they seek out Juanita.

Furthermore, Crisp et al. (2015) highlight the importance of creating culturally relevant experiences for college success among Latinxs. Findings from the current study suggest that Latinx students are more likely to persist when academic environments reflect their cultural backgrounds and values. Notably, four out of the 14 student participants specifically mentioned Juanita as a key support person who contributed significantly to their motivation, higher grades, pursuit of academic goals, and overall persistence. They attributed this to her Latinx ethnicity and familiarity with their backgrounds, which fostered *confianza* (trust).

One Metro student noted that Juanita's willingness to share her own vulnerabilities, struggles, and frustrations with her own college experience helped build deeper connections and inspired hope. As Tovar (2015) discovered in his study, these types of interactions "with institutional agents exercise a small, but significant effect on Latino/a students' success" (p. 46). In this study, it can be inferred from the findings that a high number of students identified institutional agents, such as Metro advisors and tutors, or SSP managers like Juanita, as the most influential in their academic persistence rather than faculty corroborating Tovar's (2015) study.

While the remaining 10 participants did not mention accessing City Dream services, five (including two who recently transferred to four-year institutions) praised Metro and credited it for enhancing their academic experiences. They specifically named the Metro tutors and advisors as being the most supportive and instrumental key persons in their persistence. Metro's efforts of creating a family-like environment, learning student names and making sure they are warmly greeted upon entry to the Metro resource room resonates with them.

The sub-question regarding Latinx ethnicity and persistence revealed further informative insights. Latinxs that experienced isolation because they were the only Latinx in a class coped by seeking out other students of color even when not Latinx. For example, the only second-year Central American Latinx female in a predominantly Asian and Non-Latino White (NLW) class, sought out and found comfort with other non-Latinx but "brown" students in the class. Relatedly, another Latinx student uses the term "sense" three different times to describe his intuition and assumptions of how faculty and support staff might be thinking stereotypically about him. When asked what Metro can do to improve, he begins, "they could have a better sense if they knew what we go through as Latinxs." Later, when asked about what it is like to be the only Mexican in a predominantly NLW and Asian classroom, he replies that he feels proud because he knows he belongs there and is representing his Hispanic community. Psychologically, he mediates a potential cognitive (assumption of being perceived stereotypically), as well as physical (only Latino in classroom), constraint in a manner that enables and motivates him to persist.

In contrast, a first-year Latina student in a similar situation dropped such a class after a few weeks because of the marginalization and feeling as though peers and instructor—participant explained that the instructor consistently approached her to ask if she understood the content which made her feel singled out—perceived her as "dumb". Here, her lack of Latinx peers and ideation combine to constrain her persistence; or an avoidance coping style to escape feeling dumb by dropping the course rather than reinterpreting the situation in ways that motivate persistence.

The transition to college can trigger ideational constraining threat. Scholars have documented stereotypes of Latinx college students as less academically prepared than Non-Latinx peers or not belonging in specific (e.g., STEM) majors (Baker et al., 2020; Saenz & Ponjuan, 2009). In addition to insights about the relation between negative Latinx stereotypes and persistence, further exploration of the Latinx ethnicity construct also revealed constraining tensions in Central American students with regards to living and attending college in a predominately Mexican Latinx environment. For instance, when Central American students were asked what it is like to be on a predominantly Mexican student campus, all four Central American participants were hesitant to reply. Three provided rich narratives, two beginning with disclaimers, "That's a touchy subject" and "Its hard" suggesting underlying tension between the two Latinx ethnic groups. As the findings revealed, both within and outside of CCSF, students conveyed situations of Mexicans bullying and ridiculing Central Americans in their shared communities. Evidently, students bring these experiences into college spaces. One student shared how she avoids enrolling in Chicano studies classes to avoid feeling erased. In her experience, Chicano studies curriculum rarely, if ever, offers content related to Central American history and experience. Notably, she emphasized her points, with hand gestures. When probed further, she expresses frustration with being misrepresented as Mexican, her voice louder, and maintaining eye contact (through the zoom call) after ending her response indicating how important an issue this is for her and others to be aware of important differences between Latinxs and for CCSF to do a better job in addressing the lack of specific

courses and classroom content more generally about Central Americans. Thus, it is important that staff not share an ethnic background but rather have shared experiences.

The above experiences emerge from differences in historical, social, and cultural practices between Mexican and Central American participants. Mexicans have long lived in the nearby Mission neighborhood, where most participants said they lived or spent a significant amount of time (e.g., attending school, social events, church, meeting family and friends, socializing, and shopping). In contrast, Central Americans began immigrating in higher numbers more recently during the late 1970s and 80s because of civil wars and social unrest in their home countries. These differences in lived experiences might explain why some groups discriminate against each other, as highlighted in the findings. Some Central American parents, and one particular Central American student, mentioned how they tried to remain under the radar to avoid disclosing their ethnic backgrounds and thus avoid bullying and other forms of discrimination. Building on these differences, it is also crucial to consider how gender roles also intersect with students' academic experiences and influence their persistence.

Findings associated with gender reveal relevant insights related to persistence. Several females (6) and male (2) identified students expressed that despite experiencing some traditional gender expectations from parents and extended family members—such as men should seek hard labor jobs like construction, and women should stay home and raise families—they are determined to succeed and pursue higher education rather than follow these gendered norms. Of the six female respondents, their mothers preferred that they pursue an education to avoid economic dependence on a male (i.e., husband). These women shared the same sentiment as their mothers, with one stating that such gender expectations motivated her to prove her capability and independence. She emphasized that she would never be in a relationship with a partner who believed in traditional gender roles. This determination reflects an evolution from traditional gender norms, indicating a shift towards valuing education and independence over more conventional roles.

Female respondents convey strong motivation and commitment to dispel traditional gender norms expressed by some family members and to change these perspectives among those who hold them. Similarly, male students experienced gender expectations to enter the workforce and provide for themselves. When asked about gender expectations, Metro staff believed that students aspire to transfer and obtain college degrees, yet some have stopped attending due to parental pressures to join the workforce.

Support programs and college administrators should recognize traditional gender norms as potential constraints to persistence. Given the interdependent nature of Latinx culture, a possible solution is to involve parents, families, and guardians in SSP program planning and new student orientations, as well as regularly invite them to program and college events. This engagement acknowledges that parents are dynamically evolving away from traditional gender norms and supporting their children's growing commitment to higher educational success.

Regarding improving academic counseling, 10 out of 14 students, and all five Metro staff, mentioned the lack of a dedicated academic counselor within Metro is a major academic

constraint. This program void creates a cascading burden on Metro services and concerns Metro students. For the students, this situation indicates a low quality of service or a lapse in programming, because it fails to address their counseling needs and college requirements. From a programmatic perspective, it illuminates the added hurdles and tensions between central campus academic counseling services and Metro's efforts to provide comprehensive support and key resources. This could be mitigated by implementing a dedicated academic counselor within the Metro program. Having a counselor who understands the specific needs and challenges of Metro students would streamline support services and improve the quality of academic counseling provided. Another approach could be to enhance collaboration and communication between Metro and central campus counseling services, ensuring that Metro students receive prioritized and specialized attention.

One staff member noted that the absence of an assigned academic counselor in Metro creates conflicts with central counselors, who sometimes place Metro students in non-Metro-related courses and even disagree with Metro's required course sequence. This discord was also echoed by a student who, after waiting over three weeks for an educational plan appointment, was placed in non-Metro courses and advised to pursue them despite a strong interest in joining Metro.

Hence an educational plan is crucial for students because it serves as a roadmap of courses needed to meet community college completion and transfer requirements (a required process for all community college districts in California). Meeting with a counselor who understands Metro's course requirements is essential to maintaining Metro's core mission of supporting community college success in a timely manner. Study findings convey that both Metro students and staff struggle to receive accurate and consistent information, and some students have been enrolled in non-sequenced Metro courses. Often discussed and taught the significance of education plans in Metro's First Year Experience (FYE) class, and as part of CCSFs new student orientation, such plans are heavily promoted, encouraged to complete, and pivotal to a student's academic success.

Cultural historical approaches suggest that constraints can arise from the subsystems that constitute an activity system and mediate goals. For example, CCSF subsystems relevant to the operations of Metro include college policies and transfer requirements that inform day-to-day operations and the division of labor among college staff and programs, and in this case Metro staff and academic counselors outside of Metro, both of whom provide academic guidance in greater need of alignment. Despite both CCSF entities working towards supporting student goals, friction and tensions between them are inevitable but can also be addressed once surfaced.

Interestingly, the lack of an assigned academic counselor prompted Metro staff to find creative solutions. Because credentialing and California community college protocols require academic counseling to be conducted by official academic counselors, Metro coordinators are trained to advise students about which classes to take so that when they eventually meet with a college counselor, they are prepared with a list of Metro-related courses and faculty conducive to their persistence. This approach aims to minimize Metro students being placed in

non-Metro courses and to maximize taking courses in which former Metro students had positive interactions with faculty, which research has shown to favorably impact student persistence (Terezini et al., 1999). This finding addresses Research Question 2 by elucidating frictions between what services programs can or cannot deliver, how this may affect persistence, and how services attempt to compensate for limiting frictions.

Relatedly, two key findings that highlight Metro's innovative adaptations to the constraint of missing an in-house academic counselor are recruiting and hiring current Latinx Metro students as peer mentors to provide peer coaching, situate themselves in the resource room, and help during outreach events to demystify the community college and Metro application processes for newcomers and ESL students. Both staff and students highlight having a bilingual/bicultural Latinx peer mentor to engage prospective and current Latinx students with translating college processes as extremely helpful for their services. It is not surprising that this new role is effective as it aligns with multiple mentions of the need for Latinx representation in this study. However, this creative solution to compensate for the lack of a dedicated counselor within Metro is not optimal because as current students, peer mentors will eventually transfer or graduate and the process of re-training and re-hiring such peers can be taxing and time consuming for staff.

Study findings also reveal an insightful comparison: students who are part of both Metro and the Extended Opportunity Program and Services (EOPS) experience seamless class registration and educational plan appointments. EOPS is a California state-funded counseling and special services program designed to assist low-income, at-risk students by facilitating enrollment and providing services to promote retention, graduation, transfer, and employment. A key requirement of EOPS is that participants meet with their assigned EOPS counselor at least three times per semester. Unlike Metro, EOPS does not cohort nor require enrollment in specific courses. Of the 3 Metro students that shared participation in both Metro and EOPS, they credit EOPS counselors in supporting their selection of courses related to Metro and reported fewer issues with counseling services. Similarly, all 5 Metro staff mentioned having an enabling collaboration with EOPS. One Metro staff noted that EOPS staff share information with new students about Metro, and even support Metro students with book and transportation vouchers. Together, these complementary services reduce tensions and frictions between programs and thereby increase persistence.

Unlike EOPS, a Metro staff member emphasized that Metro does not collaborate with SSPs that use a cohort model because Metro is too similar. However, they assert that for this very reason, they should be working together to broaden the resources available to students. Another Metro staff member explained that while Metro does not lose students to other SSPs, there is always competition between them. Findings suggest that there are subtle constraints brought on by program similarities, though how much this affects academic persistence is unclear and warrants evaluation with the goal of establishing a richer and coordinated network of support.

Another constraining Metro-related factor that emerges from findings is that several students are not aware of the roles of Metro coordinators/advisors, often referring to them as

[academic] counselors and not remembering their assigned coordinator's names. This lack of awareness seemed to hinder persistence for some students because they do not seek help when faced with academic challenges. When asked if they knew the name of their coordinator and the last time they spoke with them, many students not only misunderstood their role (e.g., referring to them as counselors) and only recalled interactions during the FYE course 3 to 4 semesters prior. For second-year students, especially those beyond Metro's sequence of classes, frequent contact is even more important to avoid staff losing track of them. Limited contact with students constrains Metro's ability to fulfill its mission of providing academic support and transfer information in a continuous manner and decreasing the chances of students faltering and missing important graduation and transfer deadlines.

Lastly, the exploration of the potential relationship between persistence and career goals, a subconstruct and sub-question of Research Question 1, revealed limited data. Students entering Metro often have the goal of transferring to a four-year institution, an expectation set by Metro for all participants. Some students also enter Metro with a selected major. Current study findings indicate that pursuing a college degree is directly related to fulfilling the dreams that their parents have for them. Even when some male participants were initially pushed by parents towards entering the workforce without a college degree (e.g., unskilled manual labor), their parents expressed gratitude and encouragement upon their transfer to a four-year college and pursuit of college related goals. While such motivation is evident, it remains unclear how having specific career goals relates to persistence and is influenced by college experiences.

With regards to study limitations, as with many qualitative studies, this study is not generalizable to community college student support programs nor the Latinx students who utilize them. However, as a case study of Metro, it does offer insights into the challenges of Latinx persistence in community colleges and how student support programs support and can be improved to foster greater persistence. Additionally, the recruitment of a purposive sample of 24 participants, stratified by year in Metro, gender, and Latinx ethnicity, was more challenging than initially planned, resulting in a smaller sample with notably few male participants and few Central Americans. As a result, the analysis of gender roles and Latinx ethnicity, particularly the unique as well as common experiences of Mexican and Central American participants, is limited. Nevertheless, the obtained sample does contain much of the desired purposive representation offering rich insights addressing the major research questions and Latinx relevant sub-constructs of interest with regards to academic persistence.

Despite numerous recruitment emails from the researcher to prospective participants, and two from the Metro director, few participants responded, and of those that did, over 90% were successfully recruited and interviewed. Still, one prospective participant, who had not engaged much with Metro's services and did not meet inclusion criteria for this study, mentioned that he receives many emails and initially did not believe the study recruitment pitch from Metro, or that the researcher was "legit". A longer timeline to recruit and use of snowball sampling might increase the recruitment numbers for this particular group of student participants.

Additionally, using a combination of communication modalities such as text and social media technologies to message prospective participants could help to better recruit more study participants. Findings and post interview conversations with participants and Metro staff suggest that freshman community college students do not regularly check school emails. This demographic might be better reached through social media technologies (e.g., TikTok, Instagram, Snapchat) because they tend to be frequent users and notifications of messages arrive instantly to smartphones. In addition, although an in-class presentations was an option, presenting in a class where only some students are Latinx is not feasible nor practical. An alternative could be to frequent the resource room yet not all Latinx students use it. This study was exclusive for Metro thus attending an adjacent SSP such as EOPS or City Dream was not an option. However, future research could expand to include other CCSF SSPs working collaboratively with Metro to increase outreach through other sources that support students.

Ultimately, the decision not to recruit one or two CCSF academic personnel from administration or programs on campus, relevant to the operations of Metro, also limited findings regarding how such relationships may enable or constrain Metro's efforts to support academic persistence in general and for Latinxs students in particular (see Research question 2). Notwithstanding, thick and rich narratives regarding intra-institutional relationships did emerge from interviews with Metro staff and students as discussed above with implications for improving Metro and related intra-campus practices. However, interviews with central campus academic counselors and/or their supervisor would have shed more light on what appears to be the lack of a needed academic counselor within the Metro student support program.

Regarding implications for practice, core Metro services have undergone significant changes over the past year. Interviews with four of the five Metro staff and second-year Metro students highlighted the absence of both Latinx staff members and an assigned counselor in Metro. About half of the current Metro students began the program with an assigned counselor, establishing strong rapport and relationships. After this counselor was reassigned, students had to rely on central campus general counseling to make changes to their educational plans, resulting in frustration and confusion.

As a small learning community, Metro has been documented in Love et al.'s (2021) evaluation to provide services that wrap around academic requirements, helping to connect and integrate first-generation college students and offering them a warm introduction to the college community. While Metro is still regarded as a welcoming and helpful program, the lack of Latinx representation among staff, and lack of a dedicated academic counselor, constrains its ability to optimally serve and retain current Latinx students. Additionally, CCSF's recruitment and outreach efforts to Latinx students have been limited to a few SFUSD high schools, resulting in fewer Latinx prospective students. According to Metro staff, there has been a decline in Latinx student enrollment since the onset of the Covid-19 pandemic in 2020. With fewer personnel in Metro, efforts to recruit new students are increasingly dependent on referrals and collaboration with adjacent programs such as EOPS.

To address these issues, Metro should prioritize hiring Latinx staff and reestablishing dedicated academic counseling services within the program. Enhanced recruitment efforts

targeting a broader range of high schools and community outreach can also help increase Latinx student enrollment and support their academic persistence.

Another potentially important finding voiced by staff is that Metro will no longer be grant-funded and, starting in Fall 2024, will be fully integrated into CCSF. As a result, Metro tutors will be integrated into the central campus tutoring center instead of hired through Metro. To maintain Metro's family-like atmosphere and the small learning community aspects, both supported by this study's findings and documented by Love et al. (2021) as promoting student persistence, the Metro model should preserve its central campus services in-house, such as tutoring and having an assigned counselor and community-building resource room. In so doing, it maintains a strong rapport between staff and students and keeps services centralized in a small setting within Metro, increasing the likelihood of regular student engagement.

Regarding implications for evaluating Metro's effectiveness in increasing Latinx persistence, future research should use a comparison group similar to the study by Love et al. (2021), which compares non-Metro students with Metro students. This approach would involve measuring transfer rates at two-year, three-year, four-year, and five-year intervals for students receiving and not receiving the Metro intervention. To further assess persistence patterns among Latinx groups, a mixed-method design collecting disaggregated data stratified by Latinx ethnicity and gender, would enable further in-depth analysis between Mexican and Central American students and gender within these Latinx ethnic groups. Using qualitative data collection methods, researchers could gain nuanced insights into the experiences of Central Americans on a predominantly Mexican campus and inclusive courses and programs to mitigate this dynamic.

Exploring quantitative differences in academic outcomes between Mexican, Salvadoran, and Guatemalan students using achievement data (e.g., GPA, transfer and graduation rates, persistence), demographic data (e.g., first-generation status, income, race/ethnicity, zip code), and academic services usage (e.g., financial aid, tutoring, student support) would provide a more robust understanding of persistence patterns and factors that enable or constrain college success. With the increasing diversity of Latinxs in California, collecting more disaggregated data allows for thorough within-group and between-group analyses of populations such as Central Americans and Mexicans at various levels of acculturation (Zerquera et al., 2020). This approach should also consider diverse Central American backgrounds (e.g., Nicaragua, El Salvador, Guatemala, Honduras), subgroups and regions within these countries, and other relevant experiences (e.g., rural vs. urban).

Additionally, expanding the unit of analysis to explore the role that neighborhood and regional effects may have on Latinx subgroup learning and education would provide valuable insights. Studies focused on Latinx subgroups such as Mexican Americans or Chicanos (e.g., Niemann, 2001; Nora, 1987; Nuñez & Crisp, 2012) offer detailed findings on persistence and related socio-ecological factors, such as values, and navigating systems with similarities to college (e.g., employment, social services, K-12, and healthcare). However, more research is

needed for Central Americans in states like California where they are relatively numerous yet small in comparison to Mexican Americans.

Regarding implications for theory, the theoretical framework, cultural-historical activity theory (CHAT), provides a valuable expansive lens for exploring Latinx student pursuit of higher education and academic persistence. Cultural historical activity theory directs examination of student persistence by centering culture as dynamic activity within the context of historical and social factors interacting with student, college, and support program mediation of educational trajectories. As the findings demonstrate, many students attend college to fulfill their parent aspirations, taking advantage of opportunities that less available to previous generations. This reflects the influence of cultural and historical contexts on student motivation and Latinx cultural shifts in gender roles responding to changing social contexts. Additionally, some students are driven by a desire for economic independence, aiming to succeed without relying on their parents, family, or future partners. These evolving values and practices can have both enabling and constraining effects on persistence. For example, some students navigate potential constraints by reinterpreting situations and seeking alternatives, such as the male transfer student who felt proud to represent his Hispanic community as the only Latino in his class.

CHAT is particularly useful in studying the above dynamics, because it emphasizes the role of cultural tools, social interactions, and historical contexts in shaping human social and cultural activity. By using CHAT, researchers can explore ideational tools that enable some students to navigate potentially marginalizing spaces and overcome obstacles. This approach can reveal how students draw on their cultural repertoires and community practices as well as alter them in order to adapt and persist in their academic journeys, offering insights into the complex interplay between individual and collective agency and structural factors in educational settings, all of which demand consideration.

Although Metro participants are expected to have a goal of transferring to a four-year institution, some students may have different reasons for entering CCSF. This potential mismatch between student motivations and the tools Metro and CCSF provide to facilitate college success can affect persistence patterns. Viewed as an activity system, it is posited that the student is entering to achieve a specific academic objective, presumably to transfer and gain a college degree. However, some students might pursue slightly different goals that contradict Metro's objective. Although the career goal findings were limited, some students had not formulated their college and career goals or had broad goals that do not necessarily require a college degree (e.g., to get a job quickly, obtain a certificate or enough skills to enter a trade, or to appease parents' expectations of them entering college). Thus, additional research should explore these notions and constructs of college and career goal setting.

Further applications of CHAT to persistence research could focus on the theoretical practices Metro staff use regarding how Metro students are expected to act within Metro and CCSF. As one male transfer student recommended, Metro would benefit from understanding the mental challenges Latinxs face. The tools that Metro staff develop and use to mediate support and transfer processes need to consider the nuances and irregular expectations Latinxs

bring to Metro and CCSF. These theoretical insights will help bridge practical implications to decrease transfer requirement constraints and increase persistence.

References

- Alfonso, M. (2006). Hispanic educational attainment in sub-baccalaureate programs. *New Directions for Community Colleges*, 2006(133), 17–25. https://doi.org/10.1002/cc.224
- Arana, R. (2011). Indicators of persistence for Hispanic undergraduate achievement: Toward an ecological model. *JOURNAL OF HISPANIC HIGHER EDUCATION*, 10(3), 237–251.
- Arbona, C., & Nora, A. (2007). The Influence of Academic and Environmental Factors on Hispanic College Degree Attainment. *Review of Higher Education*, *30*(3), 247–269.
- Barajas, H. L., & Pierce, J. L. (2001). The Significance of Race and Gender in School Success among Latinas and Latinos in College. *Gender and Society*, *15*(6), 859–878.
- Bordes, V., Sand, J. K., Arredondo, P., Kurpius, S. E. R., & Rayle, A. D. (2006). Validation of Four Measures of Social Support With Latina/o and Non-Hispanic White Undergraduates. Hispanic Journal of Behavioral Sciences, 28(1), 65–83. https://doi.org/10.1177/0739986305283299
- Bureau, U. C. (2017a, A). *Educational Attainment in the United States: 2017*. Census.Gov. https://www.census.gov/data/tables/2017/demo/education-attainment/cps-detailed-tables.html
- Bureau, U. C. (2017b, B). *Income and Poverty in the United States: 2017*. Census.Gov. https://www.census.gov/library/publications/2018/demo/p60-263.html
- Carales, V. D. (2020). Examining Educational Attainment Outcomes: A Focus on Latina/o Community College Students. *Community College Review*, 48(2), 195.
- City College. (2017). City College of San Francisco | Data USA. https://datausa.io/profile/university/city-college-of-san-francisco
- Cole, M. (2010). Cultural-Historical Activity Theory. *Qualitative Research*, 360–366.
- Cole, M., & Engeström, Y. (1997). A cultural-historical approach to distributed cognition. In G. [Ed Salomon (Ed.), *Distributed cognitions: Psychological and educational considerations* (pp. 1–46, Chapter xxi, 275 Pages). Cambridge University Press (New York, NY, US). http://search.proquest.com/psycinfo/docview/618408212/57019066E3A74418PQ/1
- Contreras, F., & Contreras, G. J. (2015). Raising the Bar for Hispanic Serving Institutions: An Analysis of College Completion and Success Rates. *Journal of Hispanic Higher Education*, 14(2), 151–170. https://doi.org/10.1177/1538192715572892
- Cormier, M. S., Sanders, J., Raufman, J., & Strumbos, D. (2020). *Scaling Success: Lessons From the ASAP Expansion at Bronx Community College*. Columbia University. https://doi.org/10.7916/d8-hjj5-8531
- Cortez, E., & Castro, E. L. 1. (2017). Mexican and Mexican American Student Reflections on Transfer: Institutional Agents and the Continued Role of the Community College. *AMAE Journal*, 11(2), 155–176. https://doi.org/10.24974/amae.11.2.354
- Creamer, J. (2020). *Inequalities Persist Despite Decline in Poverty For All Major Race and Hispanic Origin Groups*. Census.Gov. https://www.census.gov/library/stories/2020/09/poverty-rates-for-blacks-and-hispanics-reached-historic-lows-in-2019.html
- Crisp, G., & Nora, A. (2010). Hispanic Student Success: Factors Influencing the Persistence and Transfer Decisions of Latino Community College Students Enrolled in Developmental

- Education. *Research in Higher Education*, *51*(2), 175–194. https://doi.org/10.1007/s11162-009-9151-x
- Crisp, G., Taggart, A., & Nora, A. (2015). Undergraduate Latina/o Students: A Systematic Review of Research Identifying Factors Contributing to Academic Success Outcomes. *Review of Educational Research*, 85(2), 249–274. https://doi.org/10.3102/0034654314551064
- Edmond, N., & Melvin, J. (2014, June 1). *The Double Bind Situation: Using CHAT to Explore How Youth Work Practice is Evolving in a Digital Age.* ProPel Conference 2014, Stirling.
- Engestrom, Y., & Young, M. (2001). Expansive Learning at Work: Toward an Activity Theoretical Reconceptualization. [and] Contextualising a New Approach To Learning: Some Comments on Yrjo Engestrom's Theory of Expansive Learning. *Journal of Education and Work*, 14(1).
- Enid Zambrana, R., Amaro, G., Butler, C., DuPont-Reyes, M., & Parra-Medina, D. (2021). Analysis of Latina/o Sociodemographic and Health Data Sets in the United States From 1960 to 2019: Findings Suggest Improvements to Future Data Collection Efforts. *Health Education & Behavior*, 48(3), 320–331. https://doi.org/10.1177/10901981211011047
- Erickson, F. (2004). Demystifying Data Construction and Analysis. *Anthropology & Education Quarterly*, *35*(4), 486–493.
- Foot, K. A. (2014). Cultural-Historical Activity Theory: Exploring a Theory to Inform Practice and Research. *Journal of Human Behavior in the Social Environment*, *24*(3), 329–347. https://doi.org/10.1080/10911359.2013.831011
- Goldstein, M. T., & Perin, D. (2008). Predicting Performance in a Community College-Area Course from Academic Skill Level. *Community College Review*, *36*(2), 89–115. https://doi.org/10.1177/0091552108322631
- Gutiérrez, K. D., Becker, B. L. C., Espinoza, M. L., Cortes, K. L., Cortez, A., Lizárraga, J. R., Rivero, E., Villegas, K., & Yin, P. (2019). Youth as historical actors in the production of possible futures. *Mind, Culture, and Activity*, *26*(4), 291–308. https://doi.org/10.1080/10749039.2019.1652327
- Gutiérrez, K. D., & Jurow, A. S. (2016). Social Design Experiments: Toward Equity by Design. *Journal of the Learning Sciences*, 25(4), 565–598. https://doi.org/10.1080/10508406.2016.1204548
- Gutierrez, K., & Rogoff, B. (2003). Cultural ways of learning. *Educational Researcher*, *32*, 19–25. https://doi.org/10.3102/0013189X032005019
- Hardman, J. (2007). An Activity Theory Approach to surfacing the pedagogical object in a primary school mathematics classroom. *Outlines. Critical Practice Studies*, *9*(1), Article 1. https://doi.org/10.7146/ocps.v9i1.2086
- Hardman, J. (2015). Pedagogical variation with computers in mathematics classrooms: A Cultural Historical Activity Theory analysis. *Psychology in Society, 48,* 47–76. https://doi.org/10.17159/2309-8708/2015/n48a3
- Hoyt, J. E. (1999). Remedial education and student attrition. *Community College Review*, *27*(2), 51–72. https://doi.org/10.1177/009155219902700203
- Hu, S., & St. John, E. P. (2001). Student Persistence in a Public Higher Education System:

 Understanding Racial and Ethnic Differences. *The Journal of Higher Education*, 72(3), 265–286. https://doi.org/10.2307/2649332

- Jimenez, P. W. (2012). Institutional Agents' Impact on Transfer Student Success through the Avenue of Social Capital [ProQuest LLC789 East Eisenhower Parkway, P.O. Box 1346, Ann Arbor, MI 48106http://www.proquest.com.libproxy.berkeley.edu/en-US/products/dissertations/individuals.shtmlTel.: 800-521-0600]. In *ProQuest LLC* (p. 170). http://www.proquest.com/eric/docview/1651847832/3C32CB89DA8E4CACPQ/1
- Kimbark, K., Peters, M. L., & Richardson, T. (2017). Effectiveness of the Student Success Course on Persistence, Retention, Academic Achievement, and Student Engagement.

 Community College Journal of Research and Practice, 41(2), 124–138.

 https://doi.org/10.1080/10668926.2016.1166352
- Langemeyer, I., & Roth, W.-M. (2006). Is Cultural-Historical Activity Theory Threatened to Fall Short of its Own Principles and Possibilities as a Dialectical Social Science? *Outlines. Critical Practice Studies*, 8(2), 20–42.
- Leonardo, Z., & Manning, L. (2017). White historical activity theory: Toward a critical understanding of white zones of proximal development. *Race, Ethnicity and Education*, 20(1), 15–29. https://doi.org/10.1080/13613324.2015.1100988
- Levin, J. S., Beach, J. M., & Kisker, C. B. (2009). Educational Attainment Skewed in California Community Colleges? *Community College Journal of Research and Practice*, *33*(3–4), 256–269. https://doi.org/10.1080/10668920802580440
- Llopart, M., & Esteban-Guitart, M. (2018). Funds of knowledge in 21st century societies: Inclusive educational practices for under-represented students. A literature review. *Journal of Curriculum Studies*, *50*(2), 145–161. https://doi.org/10.1080/00220272.2016.1247913
- Love, M. B., Kased, R. A., Malik, S. K., Taylor, S., Legion, V., Graterol, C., Shada, A., Previde, P., & Wirth, P. (2021). Achieving Equity: An Evaluation of a Multi-Component, Lower Division Student Success Program. *Journal of Educational Research and Practice*, *11*(1). https://doi.org/10.5590/JERAP.2021.11.1.05
- Ma, J., & Baum, S. (2016). Trends in Community Colleges: Enrollment, Prices, Student Debt, and Completion. *College Board Research Brief*, 23.
- Malnarich, G. (2005). Learning Communities and Curricular Reform: "Academic Apprenticeships" for Developmental Students. *New Directions for Community Colleges*, 129, 51–62. https://doi.org/10.1002/cc.185
- Moll, L. C., Amanti, C., Neff, D., & Gonzalez, N. (1992). Funds of Knowledge for Teaching: Using a Qualitative Approach to Connect Homes and Classrooms. *Theory Into Practice*, *31*(2), 132. https://doi.org/10.1080/00405849209543534
- Nora, A. (1990). Campus-based Aid Programs as Determinants of Retention among Hispanic Community College Students. *The Journal of Higher Education*, *61*(3), 312–331. https://doi.org/10.2307/1982133
- Pacheco, M. (2012). Learning In/Through Everyday Resistance: A Cultural-Historical Perspective on Community Resources and Curriculum. *Educational Researcher*, *41*(4), 121–132. https://doi.org/10.3102/0013189X12442982
- Padilla, A. M., & Arellano, A. R. (1996). Academic invulnerability among a select group of Latino university students. *HISPANIC JOURNAL OF BEHAVIORAL SCIENCES*, 18(4), 485–507.

- Qureshi, S. P. (2021). Cultural Historical Activity Theory for Studying Practice-Based Learning and Change in Medical Education. *Advances in Medical Education and Practice*, *12*, 923–935. https://doi.org/10.2147/AMEP.S313250
- Reddy, V., & Siqueiros, M. (2021). 2021 State of Higher Education for Latinx Californians—The Campaign for College Opportunity. https://collegecampaign.org/portfolio/2021-state-higher-education-latinx-californias/
- Rowan-Kenyon, H., Blanchard, R. D., Reed, B. D., & Swan, A. K. (2016). Predictors of Low-SES Student Persistence from the First to Second Year of College. In W. R. Freudenberg, T. I. K. Youn, & T. I. K. Youn, *Paradoxes of the Democratization of Higher Education*. Emerald Publishing Limited. http://ebookcentral.proquest.com/lib/berkeley-ebooks/detail.action?docID=4717119
- SEA Data Tables: Student Equity & Achievement (SEA) Planning. (2022, August). [PowerPoint]. chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.ccsf.edu/sites/default/files/2022/document/SEA-Data-Tables-Spring-2022.pdf
- Smith, A. A. (2018). San Francisco's Metro Academies increase college completion for academically underprepared students. Inside Higher Ed.

 https://www.insidehighered.com/news/2018/05/31/san-franciscos-metro-academies-increase-college-completion-academically
- Thomas, D. T., Walsh, E. T., Torr, B. M., Alvarez, A. S., & Malagon, M. C. (2021). Incorporating High-Impact Practices for Retention: A Learning Community Model for Transfer Students. *Journal of College Student Retention: Research, Theory & Practice*, 23(2), 243–263. http://dx.doi.org.libproxy.berkeley.edu/10.1177/1521025118813618
- Tibbetts, Y., Priniski, S. J., Hecht, C. A., Borman, G. D., & Harackiewicz, J. M. (2018). Different Institutions and Different Values: Exploring First-Generation Student Fit at 2-Year Colleges. *Frontiers in Psychology*, 1-N.PAG.
- Tovar, E. (2015). The Role of Faculty, Counselors, and Support Programs on Latino/a Community College Students' Success and Intent to Persist. *Community College Review*, 43(1), 46–71.
- Vygotsky, L. (1978). *Mind in Society: Development of Higher Psychological Processes*. Harvard University Press. https://doi.org/10.2307/j.ctvjf9vz4
- Wang, X. (2017). Toward a Holistic Theoretical Model of Momentum for Community College Student Success (Higher Education: Handbook of Theory and Research, pp. 259–308). Springer International Publishing. https://doi.org/10.1007/978-3-319-48983-4_6
- Weiss, M. J., Ratledge, A., Sommo, C., & Gupta, H. (2019). Supporting Community College Students from Start to Degree Completion: Long-Term Evidence from a Randomized Trial of CUNY's ASAP. *American Economic Journal: Applied Economics*, 11(3), 253–297. https://doi.org/10.1257/app.20170430

Appendix A

Interview Guide: Metro Student

As explained on the informed consent form, I am interested in learning about the ways that student support programs such as Metro support or even constrain Latinx persistence. The following set of questions are related to understanding your experiences in Metro and higher education in relation to your cultural background as a M/F Mexican/Central American.

Career goals

Let's begin by telling me about your future career plans.

Question: Is attending CCSF related to a career goal for you?

What do you want to work in?

Latinx background

Building on what you just said, I want to learn more about your cultural experience as a Metro scholar.

Question: As a Mexican American/central American identified Latinx student are there ways in which Metro includes your cultural background?

Prompts: Like in staffing, course assignments, Metro resource room?

Prompt: Central American only: What is it like to be CA on a dominantly Mexican American campus?

Prompt: Why is it important, or not, for Metro to include your cultural background in their program?

Gendered role

Continuing with the topic of your cultural experiences in Metro, I now want to learn more about your gendered experiences.

As a male/female identified Latinx student, have there been expectations for you as a female/male about attending college? (needs clarity from home) ...males are hardworking, culture has pushed me to hard working.

Prompt: how about work vs college?

Prompt: Are these expectations important to you? Expect kids to separate my mom or parents, or to buy her gifts.

Key supportive person

So far you have told me about your cultural and gendered experiences, now I want to learn about any help you have received in getting to college.

Question: Has there been a key person that has helped to figure out what you need to know in college? Two most important sis and dad...

Prompt: How did/do they help you?

Prompt: A potential person at college that might be this figure and why?

Other potential factors

Anything else about Metro that supports your academic success and/or could be improved?

Appendix B

Interview Guide: Metro Staff

Thank you again for your willingness to share your experiences in Metro. The following set of questions are related to Metro supporting Latinx persistence and your perceptions of what is working and what might need improvement.

Metro Efficacy

Question: Tell me about your role in Metro

Prompt: your title

Question: How does Metro programming support or does not support Latinx student

persistence?

Prompt: tell me about the specific programming that you think works best. What area needs

the most work, and why?

Metro perceptions of relevant entities

Base the subsequent responses to the following question(s), on observations and perceptions you have had as a Metro worker.

Question: Tell me about CCSF entities/programs Metro works with collaboratively.

Prompt: how supportive or not supportive are these relationships for Latinx persistence?

Tell me more about what needs improvement

[If necessary, list of programs respondent mentions. E.g., recruitment, Counseling, Student Affairs]

Question: What are other factors you would like to share

I am interested in learning about the ways that student support programs such as Metro support or even constrain Latinx persistence. Tell me what you think Latinx Metro students will say to the following areas:

-Do you think Latinx students are attending CCSF to complete any type of career goals? Tell me what you think

-What do you think the Mexican identified student might say about Metro supporting them given their cultural backgrounds (e.g., Mexican, central American, etc.)? How about the central American student?

Continuing with the topic of your cultural experiences in Metro, I now want to learn what you think Latinx students may say about gendered experiences. What might they say to this question?

- As a male/female identified Latinx student, have there been expectations for you as a female/male about attending college? (needs clarity from home) ...males are hardworking, culture has pushed me to hard working. How about work vs school?

So far you have told me what you think Latinx students may say about their cultural and gendered experiences, now I want to ask you what you think about where, or by whom, students are receiving any help in getting to college.

-What do you think students will say to the following question: Has there been a key person that has helped to figure out what you need to know in college? Two most important sis and dad...

Appendix C

CONSENT TO PARTICIPATE IN RESEARCH

Academic Persistence Study

Key Information*

- You are being invited to participate in a research study. Participation in research is completely voluntary.
- The purpose of the study is to explore factors associated with academic persistence with Latinxs enrolled at CCSF and participating in Metro.
- The study will take no more than one hour and you will be asked to answer specific questions regarding your experiences in the topic of academic persistence.
- Risks and/or discomforts may include sharing your stigmas with higher learning, negative experiences in school, CCSF or Metro.
- There is no direct benefit to you in the immediate future or as you continue your academic journey in the subsequent semesters. The results from the study may however contribute to better designing Metro and similar programs across community colleges to better support academic persistence among Latinxs in general.

Introduction

This study is being conducted by Sergio Martinez, a doctoral student at the University of California, Berkeley, School of Social Welfare, under the supervision of Dr. Kurt C. Organista, professor at the UCB School of Social Welfare. Sergio has taught courses at CCSF for 8 years, was a former instructor and coordinator of the Metro Academy and is also a former first gen community college student. As such, he is highly invested in the success of community college students with an emphasis on Latinx students now the majority of community college students in California.

You are invited to participate in this study because you were identified as someone who works with or within Metro OR are a Metro student and have signed up for the Academic Persistence Study.

Purpose

The purpose of this study is to explore the experience of Latinx students currently enrolled in the Metro Transfer Academy student support program. Because Latinx students are the

majority of students in community colleges in California, and with CCSF now a Hispanic-Serving Institution, it is important that we better understand their experience, including ways in which Metro may help them to persist in college, as well as ways in which Metro might be improved to better meet their needs of diverse Latinx students.

Procedures

If you agree to be in this study, you will complete a virtual (e.g., Zoom) interview at a time of your choice. The interview will involve questions about your goals with higher education, experiences as a Metro participant/employee/collaborator and as a student at CCSF. It should last no longer than one hour. With your permission, I will record (or audiotape if in-person) and take notes during the interview. The zoom recording is intended only to accurately record the information you provide and will only be used for transcription purposes before being promptly destroyed. If you choose not to be recorded, I will take notes instead. If you agree to being recorded but feel uncomfortable or change your mind for any reason during the interview, I can turn off the recorder at your request. Or if you don't wish to continue, you can stop the interview at any time.

Metro student only: To participate, you must be 18 years of age or older, either first or second year Metro student, of either Mexican or Central American background, and female or male identified.

Before you begin the main part of the study interview you will need to answer the following screening questions to find out if you can be in the main part of the study:

- How old are you? (e.g., date of birth?)
- What is your ethnicity (e.g., Mexican, Chicano, Central American)?
- What is your gender (e.g., Male, female)?
- How many semesters have you completed in Metro?

Benefits There will be no direct benefit to you from participating in this study. However, it is hoped that the information gained from the study will help administrators and program managers to better understand more about academic persistence factors specific for Latinxs.

Risks/Discomforts

Participation is completely voluntary and there is no penalty for refusing to participate or discontinuing at any time after choosing to participate. Participation or non-participation has no bearing on your work with Metro or CCSF and your identity will be protected by the researcher (e.g., password protected zoom interview; securing computer in locked office and at home) and kept anonymous as much as possible.

Some of the research questions may make you uncomfortable if you have had negative experiences within an educational institution. You are free to decline to answer any questions you don't wish to, or to stop the interview at any time. Discomfort may result from the feelings of vulnerability necessary to honestly discuss your experience within academia either as a Latinx student or as an employee working to support Latinx students succeed.

Confidentiality

Your interview data will be handled as confidentially as possible. If the results of this project are published or presented, individual names and other personally identifiable information will not be used.

To minimize the risks to confidentiality, we will ensure that neither your name nor any identifying information are connected to your interview. All interview files will be kept on a password-protected laptop and within an encrypted, password-protected folder on that laptop.

Your audio recording will be transcribed and then destroyed as soon as possible after the interview. When the research is completed, transcriptions and other interview data will be saved for possible use in future research. I will retain these records indefinitely after the project is over. The same measures described above will be taken to protect confidentiality of this interview data.

Your personal information may be released if required by law. Authorized representatives from City College of San Francisco and/or University of California may review your research data for purposes such as monitoring or managing the conduct of this project.

Compensation

In return for your time and effort, you will receive an Amazon e-gift card in the amount of \$40 for taking part in this study. If you stop the interview at any time before completing all the questions you will receive an Amazon e-gift card in the amount of \$20 for your time.

Rights

Participation in research is completely voluntary. You have the right to decline to participate or to withdraw at any point in this study without penalty or loss of benefits to which you are otherwise entitled.

Questions

If you have any questions or concerns about this study, you may contact Kurt Organista, Principal Investigator at (510) 459-9550 or drkco@berkeley.edu or Sergio Martinez, student investigator at (510) 205-7316 or sergio_martinez@berkeley.edu.

If you have any questions or concerns about your rights and treatment as a research subject, you may contact the office of UC Berkeley's Committee for the Protection of Human Subjects, at 510-642-7461 or subjects@berkeley.edu.

CONSENT

You will be given a copy of this consent form to keep.

If you wish to participate in this study, please sign and date below.

Participant's Name (please print)	Date
Participant's Signature	Date
Person Obtaining Consent	Date

Appendix D

Code Thesaurus

Cod	e	Definition
CCSF-con	nstrain	This code categorizes text that describes how CCSF constrains student persistence. Text might include constraints related to financial, graduation/transfer requirements, a lack of a specific service and/or course, lack of people of color, any type of discrimination/bias/prejudice mentioned by the subject.
CCSF-er	nable	This code categorizes text that students describe as CCSF supporting personal goals and/or increasing their academic persistence. Text might include descriptions of how CCSF is helping students meet their academic goals, supporting their learning and/or providing financial support.
EG-W	'hy	This code categorizes text associated with why a student entered college
ET-Cons	strain	This code captures factors associated with ethnic background that constrain academic persistence. This includes differences in Latinx ethnicities, biases, and academic spaces dominated by one ethnic group over another. It includes lack of Latinx staff and peers. Voices include student and staff
		This code categorizes different realities between Mexican and Central American identified students. Text might include points of view and observations from the students' perspectives only. It might describe their own ethnic experiences.
Ethnicity		
	ETHN-	This code categorizes student text that describe how their
	cultural	Latin/cultural background and family have influenced their
i	influences	perspective of education and career goals.
External Factor		This code categorizes messages outside of CCSF/Metro and family structures. Text might include societal factors and messages from K-12 schooling that have influenced their educational trajectories. May include key people.

Family-constrain		This code categorizes messages, advice, and other familial experiences that students allude to or suggest to hindering their motivation and overall academic persistence.
Family-enable		This code categorizes general advice, messages, and any type of supports that family members provide students.
Friction-Enable		This code categorizes text describing Metro and any other CCSF program working collaboratively or simply sharing students, that combined, work to increase academic persistence.
Friction-constrain		This code categorizes text that describes frictions/tensions/grievances between student support programs. This might include conflicts with participating in two programs simultaneously, lack of Metro services that a different program offers, and/or Metro offering a below quality service that another program offers more effectively. Student and staff included
Friend/classmates		This code categorizes text that subjects refer to as supporting their college experience and persistence. Text might include how classmates and friends help navigate specific academic systems (e.g., counseling, financial aid, tutoring, admissions, student support programs) and/or refers to any array of CCSF resources.
GDR-Exp	pectation	This top-tier code categorizes gender role expectations in attending or not attending college. Messages may stem from family, friends, k-12 schooling
	GDR-EXPECT- Constrain	This code categorizes factors associated with a student's gender role and that constrain their academic persistence. Text might include discouraging messages from parents, family or society.
	GDR-EXPECT- Enable	This code categorizes factors/messages/life advice associated with gender role and that enable academic persistence. Text might include motivating reasons why a student might be attending college.
GDR-differences		This code categorizes student text that differentiates between gender roles. Text might include biases towards one gender over another, lack of support for one or the other and perceived notions of gender discrimination. Sexism. Messages may stem from home, parents, siblings
KP-Who		This code categorizes key people that students mention specifically in supporting their academic endeavors. Both outside CCSF and inside. Can include high school counselors or similar
KP-how		This code categorizes how a key supportive person has supported a student in getting to or while in college. This might include completing Metro's/CCSF's applications,

		troubleshooting any array of academic chatagles and averall
		troubleshooting any array of academic obstacles and overall
		academic motivation.
		This code categorizes any constraints that hinder academic
		progress not already captured. Text may include financial,
Lite Co	nstrain	family and work obligations that force a student to limit the
		number of courses that they can take or may be the reason why
		they take a semester off.
		The code categorizes text that describes how effective Metro is
MS-Effective		in supporting Latinx students from the perspective of a Metro
		staff person.
	MS	This child code captures specific text describing programmatic
	Challenge	challenges hindering service delivery
		This code categorizes text associated with outreach and
		recruitment. It may include Metro staff that recruited a student
Metro (Outreach	into Metro or language about learning about Metro through an
		outreach worker, peer educator, counselor. Does not include
		recruiters outside of Metro
		This code categorizes the role assigned to the interviewee. the
Metr	o Role	text included may capture tensions within their role that may
IVICE	o noic	hinder academic persistence.
		This code refers to Metro's First Year Experience class titled
		•
CV/ID	OCT FO	IDST 50. All entering Metro students are required to take this
SV-IL	ST 50	class. The course is sometimes taught by a Metro coordinator
		who serves as a key person in providing Metro students'
	1	academic guidance and support until they graduate/transfer.
		This code captures student and staff voices in
	IDST50-	describing/mentioning how IDST50/FYE might constrain
	Constrain	academic persistence. Could include curriculum issues such lack
	Constrain	thereof of specific topics, from the voice of the student and
		staff
	IDST50-EN	This code categorizes how Metro's IDST50/FYE class enables
	IDSTSU LIV	academic persistence from student and/or metro staff
		An array of services offered by Metro (M) that can enable
SV-Metro		and/or constrain academic persistence. Some services include
		their resource room, English and math tutoring, and enrollment
		in their First Year Experience class titled IDST 50. This code
		categorizes all services without specificity.
SV-Metro Coordination-EN		This code captures Metro's key feature, that is, students are
		assigned a Metro coordinator, who mentors and supports
		students throughout their time at CCSF. Code captures positive
		text such as affirmations about the course topics and instructor
		which that enables persistence
		without that chables persistence

	SV-Metro Constrain	This child code categorizes text that describes how student persistence might be constrained by the mandatory enrollment, issues with the assigned Metro instructor/coordinator, this might include lack of communication, bias, or a student not aware of who their assigned Metro coordinator is.
SV-Tu	toring	This code is specific for Metro tutoring; either, English or Math.
	SV-Constrain	This code refers to how academic persistence might be constrained because of English, math or both tutoring services.
	SV-EN	This code refers to academic persistence because of Metro's tutoring services. It could be either English, Math or both.
Service-Resource Room (SV-RR)		Metro offers a resource room with a few services: copying, printing, computers, tutors, a place to study and socialize.
	Service- constrains (SV- Constrain)	This code refers to the resource room and the array of services within it. Student participants might mention why they do not attend it, may not know about it, or may have had a negative experience while there.
	Service- enable (SV- EN)	This code categorizes how the resource room enables student persistence through the affirmative language used to describe the space and specific services within it. It captures reasons why they enjoy attending or engaging in the resource room.
Student Advice		This code categorizes any text that offers suggestions to improve Metro and CCSF services. Text might include specifics to a type of service e.g., tutoring, coordination, resource room, and services outside of Metro that only include CCSF services i.e., any CCSF entity
Tension		This code categorizes text that describes bureaucratic processes that hinder student access and/or collaborative relationships between Metro and other SSPs or college entities. Text might include tensions between departments or within Metro services and staff.