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With a public school student-to-counselor ratio that has surpassed 400 to 1 nationally for the past 30 years (American School Counselor Association, 2020), afterschool programs play a vital role in bridging disparities in college access.

Each year the federal government awards college access initiatives—collectively called TRIO programs—more than $1 billion in funding; this figure does not include the private capital that college access and success programs receive from universities, nonprofit organizations, and foundations (Congressional Research Service, 2020; Gándara & Bial, 2001). College access and success programs, which typically take place during out-of-school time, range widely in their size, target demographics, and services offered. Traditionally, services include guidance through the college admission and financial aid application process, college and career counseling, academic tutoring, and test preparation (Gándara & Bial, 2001; Koo et al., 2022).

Although concerted funding and energy have been dedicated to college access programs, the field suffers from a significant research and practice gap (Rowan-Kenyon et al., 2018). Studies have demonstrated that TRIO programs increase college matriculation rates, but little is known about the mechanisms that drive their success; even less is known about the effectiveness of community-based college access

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programs, despite their prevalence (Harvill et al., 2012; Rowan-Kenyon et al., 2018). This paper shows how a student-led college access program implemented by a community-based nonprofit served as an effective mechanism for preparing first-generation students for college success.

College Access Among First-Generation Students

The National Center for Education Statistics attributes first-generation status to students whose parents did not receive any postsecondary education (Cataldi et al., 2018). Compared to their continuing-generation peers, first-generation students are more likely to demonstrate risk factors that correlate positively with college dropout rates, such as enrolling in college part-time, attending two-year or for-profit institutions, and working during their studies (Choy, 2002; Postsecondary National Policy Institute, 2021; Pratt et al., 2019). First-generation students are also more likely to be students of color and to come from low-income households, further compounding the barriers they face in obtaining a postsecondary degree (Harvill et al., 2012). Six years after matriculating at college, only 56 percent of first-generation students either have graduated or remain enrolled, whereas the same statistic is 75 percent for students who have at least one parent with a bachelor's degree (Cataldi et al., 2018). Low-income first-generation students see an even slimmer rate of graduation, with a mere 11 percent obtaining a bachelor's degree within six years of matriculation (Engle & Tinto, 2008).

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Traditional College Access Programs

Traditional college access programs, which are designed to address the needs of first-generation and other disadvantaged students, are typically community-based and localized. Even nationwide initiatives like Upward Bound and GEAR UP, two of the eight federally funded TRIO programs, are implemented by local or state organizations and do not use national standardized curricula. According to the U.S. Department of Education (n.d.b), Upward Bound emphasizes academic preparation for college. Eligible organizations such as nonprofits or institutions of higher education can apply for grants to implement Upward Bound projects in their communities, with the condition that grantees "provide instruction in math, laboratory science, composition, literature, and foreign language" (U.S. Department of Education, n.d.b). In contrast, GEAR UP centers on increasing college attendance among low-income students at high-poverty middle and high schools (U.S. Department of Education, n.d.a). In both programs, exactly how these services are delivered is determined by grantees and partners.

Non-federal initiatives are similarly diverse in their program scope and focus (National Association for College Admission Counseling, n.d.). They include university initiatives like the University of Southern California (USC) Advising Corps, which pairs recent graduates with high school students to mentor them through the college application process (USC CERPP, 2022). AGUILA Youth Leadership Institute (n.d.) provides academic, leadership, and cultural enrichment for Latinx youth. 100 Black Men of America (2020), with chapters across the U.S., mentors African-American students to reach their highest academic and professional potential. Organizations like Stanford Medical Youth Science Program (n.d.) deliver college guidance to underrepresented youth for specific pathways like health and STEM professions. Although college access programs and their local chapters tend to implement their own programming, most provide, at minimum, some guidance on completing college and financial aid application forms.

Deficit-Based Understandings of First-Generation Students

Tinto's student departure theory (1993) and Bourdieu's social reproduction theory (Bourdieu & Passeron, 1990) are among the top frameworks researchers use to understand the disparities between first-generation and continuing-generation students (Ives & Castillo-Montoya, 2020). Tinto's student departure theory asserts that a student's level of social integration—

characterized by interactions with peers, faculty, and staff members—is important to persistence through college (Tinto, 1993). Bourdieu's social reproduction theory posits that upper class members preserve their socioeconomic status from generation to generation through the reproduction of dominant social and cultural norms in major systems such as educational institutions (Bourdieu & Passeron, 1990). When applied to understand the barriers faced by first-generation students, both Tinto's and Bourdieu's theories imply that first-generation students are at a disadvantage because their culturalization and socialization do not match the ethos of predominantly White academic institutions. Thus, first-generation status is treated as a deficit in such studies, opening the door to interventions focused on assimilating students to the majority culture (Ives & Castillo-Montoya, 2020; but see Tanaka, 2002).

Student-Led Programming as a Strengths-Based Intervention

Today, researchers and practitioners alike are calling for a shift in the conceptualization of first-generation status from a deficit-based to an asset-based lens, recognizing that first-generation students have sociocultural capital that may differ from that of the majority culture but is nonetheless valuable to their educational pursuits (Hudson et al., 2020; Koo, 2011; Student Affairs Administrators in Higher Education, 2020; Yosso, 2005). Specifically, researchers have found that first-generation students tend to be prosocial, interdependent learners whose education and personal development are enriched when they can integrate their lived experiences into their academic contexts (Ives & Castillo-Montoya, 2020). The process of honoring the family cultural traditions of first-generation non-majority students has been aided when colleges and universities have transitioned from "multicultural education" to "intercultural education" (Tanaka, 2003), which values each student's cultural meanings and avoids positioning students with different cultural meanings "in binary opposition to each other" (Tanaka, 2009). Scholars of intercultural education advise

practitioners to facilitate spaces that validate students' home cultures, equip them with competencies to navigate higher education, and connect their learning to practical applications that will benefit their lives and communities (Ives & Castillo-Montoya, 2020; Tanaka, 2002; Tanaka et al., 1997; Yosso, 2005).

Student-led programming may hold great potential as an asset-based intervention for preparing first-generation students for college success. Although the body of literature on student-led college access programming is nascent, the few studies available show promising results. Preliminary data on the Student Success Centers in New York City—which are staffed by youth leaders who undergo extensive training to provide college counseling services to their peers—indicate the centers have been successful in increasing college access (Chajet, 2011). Even though student leaders cannot replace adult counselors, their position as peers gives them important social capital for relating to other students, communicating about the college-going process, and fostering positive student attitudes toward college (Chajet, 2011).

Research also shows that taking a leadership role, in and of itself, may amplify student voice, agency, and empowerment. College access programs that feature youth-led participatory action research—in which youth play a central role in generating knowledge—have inspired students to speak up about inequalities, advocate for educational reform, and sharpen their resolve to support low-income, first-generation students in obtaining higher education (Cook et al., 2019; Hudson et al., 2020). One systematic review of 63 studies found that students who led participatory action research projects reported increases in their agency, sense of belonging, and academic success (Anyon et al., 2018). Along a similar line, research on youth organizing found that low-income students who participated in advocacy for social and community change were more likely to attend a four-year college, engage in civic activities in young adulthood, and report a stronger sense of agency (Conner, 2012; Rogers & Terriquez, 2013).

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Program Rationale, Context, and Design

MAPS 4 College is a community-based nonprofit organization founded by Sarai Koo in 2009. The first author of this paper, Helen Chiu, is a program alumna who now leads the nonprofit as its executive director. The other authors had leadership or supportive roles in MAPS.

MAPS established the first afterschool college access and success program in a small, underserved community on the east side of Los Angeles County. The community's college graduation rate was low at the time. Among residents ages 25 or older, 56.7 percent had graduated with a high school diploma or GED, and less than 12 percent held a bachelor's degree or higher (U.S. Census Bureau, 2010). The community's high schools ranked in the bottom 30th percentile on the Academic Performance Index in 2010 (California Department of Education, 2021). About 90 percent of students in the community's high schools identified as Latinx, and over 70 percent qualified for free or reduced-price lunch (National Center for Education Statistics, 2022).

Upon establishing a partnership with the local government and receiving free office space and administrative support, MAPS implemented a range of college and career development initiatives in the community, from countywide teen summits to job training for adults (Killen et al., 2021). The College Preparatory Leadership Mentoring Program (CPLMP) was MAPS's capstone college access and success program.

CPLMP was designed to become a youth-led college access program in which, with the support of subject matter experts and facilitators, students would become the drivers of their own learning. Like traditional college access programs, CPLMP provided resources to help students succeed through the college application and matriculation process (Killen et al., 2021). Students had the opportunity to tour colleges, interact with admissions officers, receive college counseling, and participate in a summer college readiness bootcamp (Koo et al., 2022). All participants were students of color who qualified for free or reduced-price lunch; 96 percent identified as first-generation students (Koo, 2014). Participant data for this study were gathered during the years 2010–2014; see Table 1.

CPLMP differed from traditional college access programs in its holistic approach. Based on the belief that youth require a broad array of skills to successfully transition to college, CPLMP worked to strengthen participants' sense of agency, voice, grit, and purpose. It also equipped students with leadership skills using the SPICES framework (Koo, 2014):

- Spiritual: self-realization and self-awareness surroundings

Table 1. CPLMP Student Demographics, 2010–2014

Variable	N	Percentage
Total students who completed CPLMP	33	100%
First-generation college students	32	96%
Eligible for free or reduced-price lunch	33	100%
Gender		
Female	28	85%
Male	5	15%
Race/ethnicity		
Asian American/Pacific Islander descent	6	18%
Latino/Hispanic American descent	27	82%
Grade level when first joined		
Junior	22	67%
Senior	11	33%

Note: Due to a grant stipulation, the program was open only to 11th or 12th grade female students during 2010–2012.

- Physical: physical and physiological poise
- Interpersonal: intrapersonal and interpersonal integration
- Cognitive: cognitive and creative consciousness
- Emotional: economical and emotional equilibrium
- Social: sociable and service-oriented society

SPICES is a novel human development paradigm that addresses the multiple dimensions of self in an approach Koo terms *dynamic interplay* (Koo, 2011, 2014). The SPICES framework aims to help people to become balanced and centered in all areas of their lives by transforming them from the inside out. In CPLMP, the SPICES framework was implemented through the three programmatic features outlined in this section: leadership training, peer-to-peer teaching, and community action projects. This section also highlights how the program evolved, in response to student feedback, to incorporate more opportunities for youth leadership.

Leadership Training

All CPLMP students underwent training that gave them a framework for leading their peers. Cohort 1 read writings on servant leadership and case studies of youth-led education reform; held discussions evaluating diverse leadership models; and explored concepts such as social stratification, equality versus equity, and agency.

After Cohort 1, the leadership training became more robust, adding workshops on social, emotional, and communication competencies. Modeled after Socratic seminars and youth-led participatory action research (Koo & Lester, 2014), roundtable discussions became more frequent as participants began to open up about their personal struggles and perspectives on social injustices. The discussions became a place for students to express their questions and explore nuanced ideas together.

After three cohorts, Koo drew on SPICES (Koo, 2014) to develop a comprehensive leadership and character development training program. The three-month training taught students holistic life and leadership skills ranging from grit and self-awareness to intra- and interpersonal

After Cohort 1, the leadership training became more robust, adding workshops on social, emotional, and communication competencies.

communication, socioemotional intelligence, mental wellness, and more. The program focused on the dynamic interplay of components that would prepare students to transition to college and adulthood.

Embedded in the leadership training and the MAPS program structure was the belief that any student can be a leader. This belief was reinforced through the deliberate choice of words. Participants were referred to not as *kids* but as *youth, students,* or *leaders*. Participants were not given hierarchical leadership roles, such as president and secretary, as is typical in school clubs. Instead, all participants—no matter their GPA, age, or cohort—were invited to take an active role in leading CPLMP. As facilitator, Koo held regular discussions to give students space to voice how MAPS could be improved, what college preparation resources they needed, and what topics they wanted to cover. Whenever possible, she implemented student feedback and supported the execution of their ideas. The purpose was for students to develop as cofacilitators of the project (Koo & Tanaka, 2015).

Peer-to-Peer Teaching

In tandem with leadership training, students carried out peer-to-peer teaching related to the ACT college entrance exam, one of two exams that fulfilled the standardized test requirement of most colleges until 2020. Peer-to-peer teaching served two purposes. First, being a teacher required participants to deeply internalize the subjects they taught. To sharpen their comprehension, students taught both their highest- and lowest-scoring subjects.

Second, peer teaching was a vehicle for leadership development because it encouraged young instructors to take ownership, make decisions in consideration of others, and communicate multilayered concepts. After 10 weeks of lessons by an expert instructor, Cohort 1 was guided by adult facilitators to recruit the next cohort, select the subjects they would teach, and deliver lessons. Once new students came on board, they received lessons from peer teachers and worked in small groups for one semester before graduating to become instructors themselves. At the end of each semester, students held planning meetings during which they shared teaching

methods, set attendance policies, determined the next semester's meeting schedule, and gave feedback on how facilitators could support them.

Community Action Projects

CPLMP students were encouraged to execute community action projects as part of their leadership training. They read and discussed case studies of youth who were addressing social inequalities across the nation. In Socratic seminars, they identified personal and sociopolitical issues that affected them and expressed their desire to transform their community (Koo & Lester, 2014). The MAPS facilitator therefore invited them to plan, direct, and execute college access events in the city. As in the peer-to-peer ACT teaching, this component enabled participants both to exercise leadership and to create college-going resources that would benefit them and their peers. Participants had the chance to participate in meetings with city council members and representatives of the community's recreation department, to speak at school board meetings about their initiatives, and more. MAPS also supported the execution of independent projects that students proposed.

Program Evolution from Facilitator-Led to Youth-Led

The preceding sections have highlighted some ways in which MAPS evolved over the four years to respond to participants' feedback and to facilitate youth leadership, such as the shift from instructor-led to peer-to-peer ACT training, the incorporation of participant feedback, and the development of the SPICES framework. Here are other examples of how the program changed:

- In response to participant feedback, ACT lessons moved from all day on Saturdays to two hours per evening on Mondays and Wednesdays.
- The ACT instructor position was replaced by a youth leadership specialist.
- Participants took over from staff the responsibility for recruiting the next cohort of students and designed the recruitment strategy.
- Staff continued to teach leadership development workshops, facilitate college visits and other events,

and host guest speakers, but they shifted from leading roundtable discussions to guiding students to lead.

Program Results

MAPS participants' outcome data, interviews, and reflections on their program experience illustrate the difference CPLMP made in students' college access and preparation, leadership and community action, and college matriculation and success.

College Access and Preparation

On average across the four cohorts, students saw a five-point increase in their ACT scores. The highest jump was 12 points. Students' initial ACT scores ranged from 9 to 31 out of 36 points. Their mean baseline score was 19—which matched the average ACT score of students in the community's two high schools—and their mean final score was 24, three points higher than the national average. For context, the ACT College Readiness Benchmarks are 18 for English, 22 for math and reading, and 23 for science (Allen & Radunzel, 2017). The composite score based on these benchmarks is 21.

Students who taught the most gained six points on average, whereas students who taught rarely or not at all had an average increase of three points. In line with the literature on peer teaching (Stigmar, 2016), students developed skills such as collaboration and awareness of their learning styles through peer lessons. For example, a student in Cohort 4 shared:

> Having someone stand up in the room and teach me the ACT curriculum didn't really work for me, but it did help me understand what I had to do to improve my ACT score. Sitting in small groups did help me work with others around me. I learned how to explain things to others, which I totally was not good at before MAPS.

The student-run nature of the program gave participants space to integrate their specific and unique needs into their college preparatory process, but they required time to become accustomed to voicing their thoughts. Initially, students in the first cohort were quiet when asked for their feedback, even when it came to decisions like what snacks they wanted. As one student observed:

> Students who taught the most gained six points on average, whereas students who taught rarely or not at all had an average increase of three points.

We'd sit there awkwardly shy and silent when Dr. Koo asked us what we wanted to eat, sometimes for an abnormally long span of time. We simply didn't want the power.... That was the feeling I got from the initial stages of Cohort 1. I think the mindset was, "What do I know? You're the adult and teacher, you should know."

As they underwent the leadership training and were consistently given a space to speak, students became more vocal. During Cohorts 2 and 3, students decided to change the meeting times for ACT lessons from Saturdays to weekday afternoons, implemented 15-minute breaks between hourlong lessons, and crafted a policy in which tardy students would write a short essay on how to avoid being late. Students also demonstrated a high capacity for developing creative teaching strategies. They experimented with teaming up to deliver lessons, found helpful online resources to share with each other, and used examples from their advanced math classes for lessons. By Cohort 3, students ran lessons and planning meetings mostly autonomously.

The student-led program model allowed participants flexibility to structure their meetings according to the needs of each cohort. For example, although students in Cohort 3 kept to their ACT teaching schedule most of the time, sometimes conversations from their leadership trainings carried over into teaching time. In that case, they used their ACT time to continue discussions on subjects such as the needs of undocumented residents in their community, national immigration policies, familial relationships, and career aspirations. In one session during Cohort 3, when most students were seniors, they changed the meeting focus from an English prep session to a roundtable discussion on their feelings about school, the pressures of college applications, and their feelings of anxiety about the future. In Cohort 4, students began coming to the program early and tutored each other for their Spanish and math classes before ACT lessons started.

This fluid program style, however, did not appeal to every participant. A student from Cohort 1 noted, "There were many times where I was put off by the

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disorganized way that we functioned as a group." Because the program prioritized student empowerment, all MAPS activities were voluntary. Regular attendance was highly encouraged but not strictly enforced. Of the 48 students who signed a contract of participation to join CPLMP, 33 completed the program by finishing one full year of program activities. Students who dropped out typically did so within the first month, usually due to personal reasons or schedule conflicts with other afterschool activities. Those who stayed, however, tended to commit for the long haul. Even after matriculating at college, about 15 percent of MAPS students returned during summers to mentor younger participants.

Leadership and Community Action

Although students may have joined MAPS for ACT prep and college application guidance, many gravitated toward the program's leadership development and community action projects. A student from Cohort 4 captured this sentiment in his reflection on MAPS:

> MAPS initially appealed to me because of the free ACT prep it offered. As I stayed in the program, I found that it offered more than it advertised.... Politics, religion, society, and even the qualities of a lasting existence were brought up in civilized, roundtable discussions. I'd often heard from relatives that such conversations existed on higher education campuses, but never did I think I'd find them so close to home.... We saw the inequities society shackled us with due to our geographic location and upbringing, and decided to organize several college fairs and information sessions in the area to generate interest in higher education.

Indeed, after participants became aware of their capacity to be change agents, they were energized to lead projects that could leave a positive mark in their community. In response to being tasked with executing college access events, MAPS students launched five countywide youth-based events, including a teen summit and three college fairs. Students organized themselves into teams to recruit volunteers, managed the event schedule, created marketing materials, contacted guest speakers, and gave thoughtful

responses during meetings with elected city leaders. During one teen summit, MAPS and its students received an award from a state senator in recognition of their community leadership.

Outside these projects, students launched personal initiatives and stepped into leadership roles at their schools. For example, students started a fundraising project to help undocumented students pay for college applications, petitioned to redress misogynistic undertones in their school's dress code, and founded a MAPS 4 College club at their school to spread knowledge on college access. One student, seeing many problems with his school's student government, discussed the issues with his CPLMP peers and then successfully ran for student body president. Another student pursued his passion for film by becoming president of the school drama club. He directed six plays in two years and won a full-tuition scholarship from the University of Southern California School of Cinematic Arts. Furthermore, the integration of college prep and leadership helped some participants tether their educational pursuits to a greater purpose. One student from Cohort 4 wrote, "After being involved with my community and seeing how happy I made others, I realized that this is what I want to do for the rest of my life. I want to help others and work for my community."

> Students held low expectations that their lived experiences might be integrated into their higher education. However, when they were given the space to share, collaborate, and lead, they engaged in deep discussions on personal purpose and community justice.

College Matriculation and Success

Of the 33 students who completed the program in Cohorts 1–4, 100 percent matriculated to college, and 88 percent enrolled directly in a four-year university. On average, students were admitted to universities with acceptance rates that ranged from 20 percent to 40 percent. Most enrolled in public state institutions, but four students ventured out of state for their studies, and four attended highly competitive private colleges on full or near-full financial aid packages. At least three of the four students who enrolled in community colleges successfully transferred to a four-year university. In 2022, of the 24 students we located through follow-up, 100 percent had graduated from college. Four had gone on to earn graduate degrees;

all four worked at the time we contacted them as educators with a commitment to giving back to their communities.

Lessons Learned

Preparing low-income first-generation students to succeed through college may not be as simple as providing guidance on completing college and financial aid applications. We found that young people were wrestling with significant questions regarding their identity, community, career, and purpose. They worried about national politics, dealt with pressure to provide for their families, and experienced significant feelings of self-doubt and anxiety.

Research has found that first-generation students often experience a sociocultural gap between their upbringing and their experiences at predominantly White institutions (Ives & Castillo-Montoya, 2020). This gap may exist even before students matriculate at college. MAPS students understood that college was important, but their concept of preparing for college revolved around test prep and college application forms.

Students held low expectations that their lived experiences might be integrated into their higher education. However, when they were given the space to share, collaborate, and lead, they engaged in deep discussions on personal purpose and community justice. Students structured the program to fit their needs and organized projects around issues that were most pressing to them. What's more, when youth were given access to knowledge about the college-going process, they succeeded in sharing this knowledge with their broader community.

A college access program predicated on student leadership can be a powerful avenue to teach students how to lead, self-advocate, and take an active role in shaping their education. Of course, building such a program requires time and patience on the part of program staff. Students might be initially uncomfortable with changes in traditional power structures between youth and adults. They may make mistakes in the process of exercising peer leadership. They most definitely need an equitable and inclusive space where

they feel safe to speak their minds and implement ideas without fear of failure. Best practices implemented in CPLMP to facilitate such a space included:

- Providing tangible opportunities for students to lead and make decisions on questions ranging from what snacks to buy and when to meet to what values the group should espouse
- Inviting students to engage in event planning meetings alongside adults
- Hosting weekly roundtable discussions to solicit young people's input and facilitate sharing
- Using open-ended questions that encouraged students to think critically and arrive at their own conclusions
- Speaking with neutral and positive language so that information was never conveyed negatively
- Consistently reiterating the importance of youth voice to the success of CPLMP and acknowledging that adults did not have all the answers
- Treating all students as leaders and rejecting hierarchical structures and titles
- Facilitating discussions on power sharing, voice, agency, group values, and leadership

In addition, MAPS showed that peer-to-peer teaching can be an accessible method of incorporating academic enrichment into college access programming. Colleges have increasingly shifted away from using standardized tests like the ACT to evaluate applicants, so test prep may not be included in all college access programs. Still, peer-to-peer teaching can help students collaborate to study for their school courses, exercise leadership, and discover their learning styles. Small-group teaching sessions in which each member is responsible for delivering a lesson may be more productive than a lecture-style model; we found that the act of teaching often precipitated the greatest learning gains.

Facilitating College Success for First-Generation Students

First-generation students are much more capable than some researchers and practitioners recognize. Unfortunately, when first-generation status is treated as a deficit, students may internalize this judgment and doubt their own potential to succeed in higher education. Afterschool college access programs can play a critical role in shifting this narrative. In supporting students through the transition from high school to college and to adulthood, these programs can provide

students with leadership experiences that empower their voice and agency. They can help first-generation students integrate their lived experiences with their academic pursuits and position them as conveyors of knowledge through peer-to-peer teaching and student-led programming. First-generation students typically do not have the same access to college-going knowledge from their parents as continuing-generation students. However, with support from adult experts, they can not only power their own success but also work with community leaders to build a strong foundation of college-going capital for other young people in their neighborhoods.

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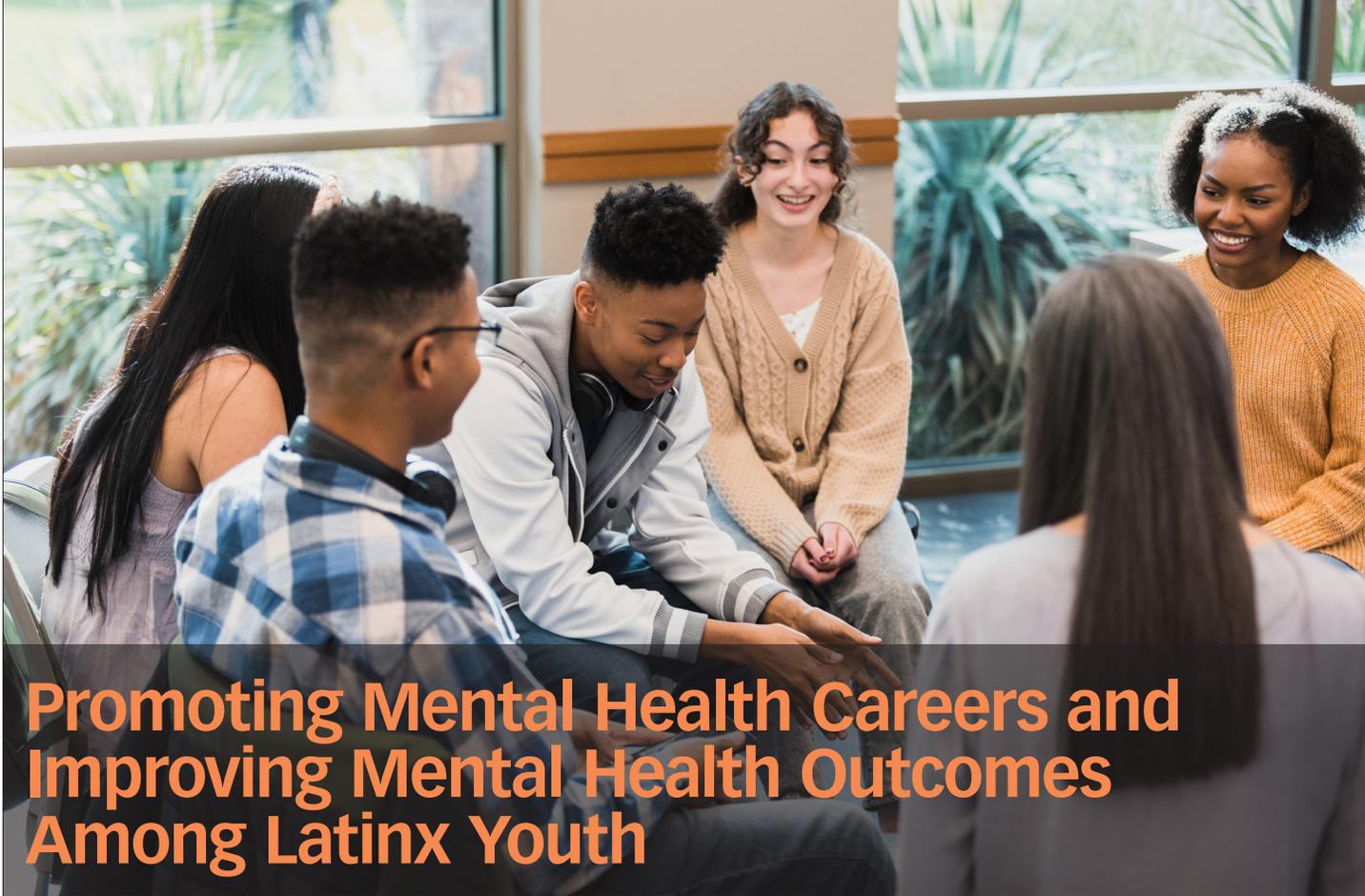
Promoting Mental Health Careers and Improving Mental Health Outcomes Among Latinx Youth

Sarah Underwood, Heather Diaz, Stephanie Manieri, and Magalli Larqué

"Before I started this program, if anybody ever said they had a mental illness, I'd probably immediately have thought that they were crazy. And I probably would have had this perspective that I myself could never have a mental illness because, as a Latina, I have to be strong and resilient. I can't show signs of weakness because that's not who we are."

Sarahi, the 18-year-old Latina quoted here, enrolled in the Latino Service Providers (LSP) Youth Promotor Internship program as a youth *promotora* (YP) in 2019. Sarahi was interested in psychology because she had seen friends and a family member struggle with mental health. Being a YP helped her overcome the stigma she associated with seeking mental health services:

After doing this program and learning that … it's okay to take care of your mental health, I'm defi-

nitely more open to seeking mental health services. In fact, I did go to see my school psychologist…. I was so nervous because I didn't know if my friends were going to see me…. But at that moment I thought … that my mental health is more important than what people think about me…. This just really highlights how I'm more open to accessing the resources that I need.

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As Sarahi moved into the YP Internship program's second tier in 2020, LSP partnered with a mental health service provider to offer five free therapy sessions to any YP who wanted them. Sarahi took advantage of this opportunity and then continued to work with the therapist on her own. She noted that one reason Latinx people might not seek mental health services is that "they just feel like there isn't someone there for them. It's a lot different speaking with someone who is White as opposed to someone who is Latino or Hispanic and from a very similar cultural background." Sarahi said that the YP program opened her up to careers in mental health, "like being a community health worker, a social worker, a clinical psychologist, all those kinds of different careers to help a community."

Sarahi's experiences as a YP showcase how youth-serving organizations like LSP can design culturally responsive out-of-school time (OST) programs (Erbstein & Fabionar, 2019) that engage, support, and mentor Latinx youth to recognize the risks and assets linked to their mental health and well-being. The YP program simultaneously addressed career readiness by exposing participants to mental health professionals and career pathways, thereby nurturing the bilingual-bicultural mental health workforce of the future. Some researchers posit that youth who make it out of challenging environments do so because they receive support and guidance from nonfamilial adult mentors who support positive racial and ethnic identity development (Stanton-Salazar & Spina, 2003). A critical part of the YP solution was to employ bilingual-bicultural Latinx program staff who worked to develop trusting relationships with participating Latinx youth, their families, and community leaders.

Program Context

Latino Service Providers is a nonprofit organization in Sonoma County, California, whose mission is to serve as a bridge across generations in Latinx communities. LSP accomplishes its mission by advancing the development of youth leaders; building awareness about health and wellness, culture, and social issues; and advocating for equity across race and ethnicity.

LSP launched the YP Internship program in response to the steady increase of the Latinx population in Sonoma County and an attendant concern for ongoing mental health disparities (Sonoma County Behavioral Health Division, 2020). Compounding and overlapping traumas in Sonoma County—police brutality toward people of color, historic wildfires, a major flood, the COVID-19 pandemic, and economic and political instability—have complicated and exacerbated mental health distress and disparities.

Program Purpose and Description

Funded by the Office of Health Equity, California Department of Public Health, under the California Reducing Health Disparities project, the YP Internship program was designed using the *promotores de salud* model. This term is Spanish for "community health workers," referring to lay health workers who provide outreach and services in Spanish-speaking communities (Centers for Disease Control and Prevention, 2019). Evidence indicates that using a *promotores de salud* model can improve Latinx health outcomes (Wasserman et al., 2007). *Promotores* have positively influenced mental health service delivery and outcomes in Latinx communities (Moon et al., 2021; Stacciarini et al., 2012; Waitzkin et al., 2011). While the *promotores* model has been well researched, there are few documented reports of the impact of using young people as *promotores*.

> Evidence indicates that using a *promotores de salud* model can improve Latinx health outcomes (Wasserman et al., 2007).

The YP Internship program seeks to reach Latinx transitional age (16–25) youth in Sonoma County. Its goals are to work with Latinx youth and their communities to:

1. Increase mental health knowledge
2. Decrease mental health stigma
3. Increase mental health service-seeking behaviors
4. Increase career readiness and workforce skills among participants
5. Increase the number of bilingual-bicultural mental health providers
6. Improve mental health outcomes and reduce disparities

YPs are required to be bicultural and bilingual in English and Spanish; to be between the ages of 16 and 25; and to live, work, or go to school in Sonoma County. They are also required to make a one-year commitment to the program. For this study, participants were recruited between December and February of each of the three cohort years, May 2018 to May 2021. To

recruit participants, staff posted on social media and delivered presentations at high schools across Sonoma County and at two local universities. Referrals to the program also came from community leaders, YP alumni, school counselors, teachers, professors, and staff or students in other youth programs.

Reducing stigma and mental health disparities in the Latinx population requires strategic messaging that validates community members' beliefs and lived experiences. To this end, the YP program implemented four core strategies:

1. YP engagement and training
2. Community outreach and engagement
3. Mental health career exploration
4. Early intervention mental health services

Strategy 1: YP Engagement and Training

The heart of the program is the recruitment, selection, training, and ongoing engagement of bilingual-bicultural YPs. LSP staff recruit and train YPs to participate in the 12-month project intervention cycle, which begins each May at the end of the school year. After completing a digital application form, applicants participate in a formal interview with LSP staff. Selected youth and their caregivers attend a bilingual orientation to learn more about the project.

Trainings are organized by LSP staff and delivered by trusted subject matter experts, many of whom are Latinx leaders in the community. Training topics include principles of being a community health worker, health inequities, mental health first aid for youth, suicide prevention, LGBTQ+ best practices, domestic violence and sexual assault, substance abuse, careers in mental health, artistic expression, and job-seeking skills. YPs are expected to participate in approximately 124 hours of training per year, which includes a weekend retreat; they must also attend meetings and community engagement activities. They receive quarterly stipends funded by the state grant and other funding sources.

LSP staff and partnering presenters develop positive racial and ethnic identity among YPs by incorporating Latinx indigenous knowledge and cultural practices:

1. Employing bilingual-bicultural Latinx program staff
2. Providing written materials in both Spanish and English when possible and delivering training sessions in Spanish or in English with Spanish interpretation
3. Dedicating one month of the training to cultural and traditional healing practices

4. Encouraging families to share the foods of their cultures at special events and celebrations
5. Using Latinx humor, storytelling, and music at meetings and events
6. Employing an artist in residence who engages participants in artistic projects centered on the Latinx experience.

In addition, LSP strives to address intersectionality when designing and delivering trainings. The work addresses a wide array of communities, including LGBTQ+ individuals, young people in the foster care system, undocumented people, unhoused individuals, and other marginalized groups.

Strategy 2: Community Outreach and Engagement

Because YPs are bilingual and bicultural residents who live, work, or go to school in Sonoma County, they can engage the local Latinx community, offer information in Spanish, interact in a culturally appropriate and acceptable manner, and gain the trust of individuals and families. LSP staff and YPs use a variety of community outreach and engagement strategies to reach Latinx audiences. For example, they not only design and create culturally and linguistically appropriate materials that promote mental health but also engage in informal conversations with friends, family, classmates, and colleagues. They deliver formal presentations, post on social media platforms, put promotional materials on local bulletin boards, and speak to local news outlets when the opportunity arises. Staff ensure that all community outreach and engagement efforts and messages are tailored to the local Latinx community. For example, YPs often conduct *pláticas* (discussions) or host tables at familiar events and places, such as schools, club meetings, community centers, and parks—places where community members can feel safe to discuss sensitive mental health topics.

Strategy 3: Mental Health Career Exploration

Exploration of mental health careers is embedded in the project in multiple ways. Mental health professionals are guest speakers at meetings and trainings. At the end of the year, staff provide training on job-seeking skills with pointers for résumés, cover letters, and interviews. In addition, LSP staff and *concilio* members (volunteer community leaders) coach YPs throughout the year to refine their skills in presentation and

public speaking, interpersonal communication, time management, teamwork, and leadership.

All YPs are trained in community health work and mental health resources and services. They also have the opportunity each year to choose one of four specific tracks: mental health, emergency preparedness, environmental education, and civic engagement. Within these tracks, groups of four to ten YPs design and implement a mental health project of their choice, with the aim of producing a product that will affect some facet of the local community. LSP staff walk each project group through an initial design process that includes all voices and assigns action steps. From there, YPs take the lead on their projects, in the process improving their professional skills and career readiness. Some examples of project outputs include production of a podcast, bilingual videos posted on YouTube, an annual event called Stomp the Stigma, and presentations to younger children.

Strategy 4: Early Intervention Mental Health Services

The YP program was designed to be a stigma reduction and prevention program. In 2020, LSP staff added an early intervention component to help YPs cope with a constellation of traumatic events in Sonoma County: fires, floods, the COVID-19 pandemic, and economic and political instability. Staff secured in-kind support from a local mental health provider that specializes in serving transitional-age youth up to age 25. Like Sarahi in the opening vignette, YPs had the opportunity to engage in up to five counseling sessions free of charge; some continued with services beyond the free sessions.

Research Methods
Sample

All consenting YPs in the three cohort years of the project (school years 2018–2019 to 2020–2021) were included in the research. The project engaged 64 YPs across the three cohort years, which exceeded the goal of 60. However, seven YPs withdrew due to conflicting family and/or school obligations and one did not consent to the evaluation, leaving a total of 56 participants in the evaluation sample, as shown in Table 1. The small sample size and the small number of participants with both pre- and post-participation surveys (less than 20 per cohort) limit the statistical power of the quantitative analysis.

Design and Measures

The evaluation of the Youth Promotor Internship program used a mixed-methods design consisting of a pre-post survey and an exit interview administered to participants in all three cohorts.

Table 1. Cohorts and Sample Sizes

Cohort	Year (May to May)	YPs Enrolled	Total Evaluation Sample*
Cohort 1	2018–2019	21	17
Cohort 2	2019–2020	22	20
Cohort 3	2020–2021	21	19
Total		64	56

* Excludes YPs who withdrew from the program or did not consent to the evaluation.

Quantitative

The quantitative design included an interrupted time series using a pre-post survey tool developed by the Psychology Applied Research Center at Loyola Marymount University for use by all projects implementing the California Reducing Health Disparities initiative. The survey has an adult version, which was administered to participants aged 18 and older, and an adolescent version, which was administered to participants aged 16 and 17. Surveys were administered at the beginning and end of all three cohort years. The survey has two main parts: *psychological distress* and *cultural connectedness*.

Psychological distress was measured using six screening items that ask about the frequency of negative emotions such as feeling nervous or worthless (Kessler et al., 2002). Frequency was scaled from 0, "none of the time," to 4, "all of the time." Items were summed to calculate total raw scores, which could range from 0 to 24. A higher score indicates a greater level of psychological distress. Participants were classified into three groups: low (0–4), moderate (5–12), or severe (13 or above) psychological distress (Pirraglia et al., 2011). Total raw scores and levels were used for analysis.

Cultural connectedness was measured in two subscales: *cultural connectedness* and *cultural protective factors*. *Cultural connectedness* was measured using four items on a five-point Likert scale ranging from 1, "strongly disagree," to 5, "strongly agree." The sum of

the four items was used as a composite index, with a higher score indicating stronger cultural connectedness. *Cultural protective factors* were measured using two items on a similar five-point Likert scale. The sum of the two items was used as a composite index, with scores ranging from 4 to 10 to indicate fewer or more cultural protective factors.

Qualitative

The grounded theory qualitative study sought to understand how the YPs interpreted their experiences in the program and the meaning they attributed to their experiences. To that end, LSP staff conducted semi-structured in-depth exit interviews with all 56 consenting YPs. The qualitative instrument consisted of five primary objectives and 15 guiding questions, which assessed YPs' level of satisfaction with the program, key learnings, experiences delivering education to the Latinx community, development of professional skills, change in confidence, and change in career interests. Additional questions were added in the last two cohort years about YPs' attitudes toward seeking services, their experience with early intervention treatment sessions, and specific challenges related to the wildfires and the COVID-19 pandemic.

Data Analysis

For each quantitative measure, we used composite scores for analysis of matched samples for which we had both pretest and posttest scores, using paired *t*-tests to compare pre and post scores and McNemar tests to determine whether changes in psychological distress levels were statistically significant.

For qualitative measures, we recorded each interview, with consent, and then transcribed the data. Using a grounded theory approach, we conducted content analysis by allowing themes to emerge from the data. The local evaluator and a second rater used interrater reliability methods to determine the level of agreement as they identified themes and coded a set of transcripts from the first evaluation cohort. Once

interrater reliability was greater than 80 percent, a coding scheme was finalized and used for subsequent cohorts. Codes were identified and compared across cohorts to develop major theme categories and subcategories.

Results
Participant Demographics

The 56 participants in the sample represented 10 of the 18 traditional public high schools in the county and one of the 12 alternative high schools. Among participants who provided their demographic information, over half were 16 or 17 years old, as shown in Figure 1. The sample had more female representation than male. Most participants identified as heterosexual or straight, while 19 percent selected bisexual, gay, or not sure.

All participants were bilingual; however, 85 percent indicated they were more comfortable speaking English. The majority indicated that they had a mental health need; 53 percent indicated they utilized mental health care and 47 percent did not, pointing to unmet mental health needs.

Psychological Distress

Figure 2 on the next page shows the pre and post results for the 44 participants who answered the psychological distress questions on both surveys. Before the intervention, 20 percent of respondents fell into the low-level symptoms group, while 30 percent

Figure 1. Demographics of Youth *Promotores*
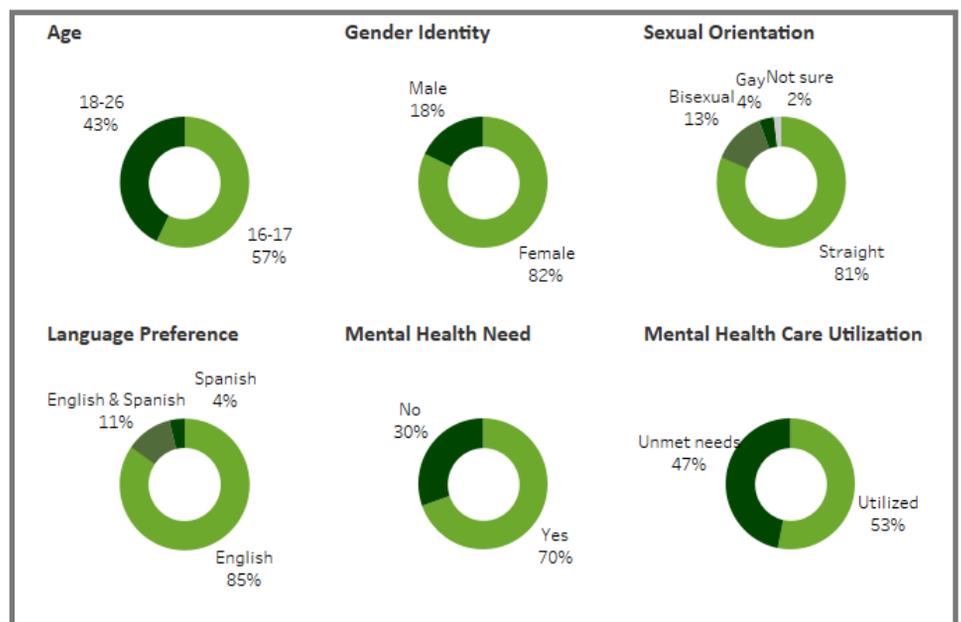
N = 32–56

were classified in the severe-level symptoms group. After the intervention, 25 percent fell into the low-level group and only 14 percent into the severe-level group. These changes were not statistically significant. However, across all cohorts, we found a significant decrease in feeling worthless (1.2 to 0.6, $p < .01$) and a marginally significant change in feeling restless or fidgety (2.1 to 1.7, $p < .10$).

In exit interviews, YPs said that they experienced stress due to factors such as school workload, college applications, part-time work, relationships, the pandemic, wildfires, economic and political unrest, and other challenges. In fact, 80 percent of YPs in distress, 80 percent said they would do so, and 90 percent said they would be willing to help someone close to them seek services. When LSP gave them access to free mental health services, 84 percent of YPs in Cohort 3 took advantage of the opportunity. Having had that experience helped some YPs to feel more confident in referring others to services, as one YP said:

> We were so fortunate to get therapy, and now we can truthfully say that we've done it. It's different to say it and never have done it yourself, you know? I really enjoyed my therapy sessions, and personally they helped me a lot. So, I'd be very likely to encourage someone, and it'd be very genuine.

Figure 2. Level of Psychological Distress Reported by Youth *Promotores*
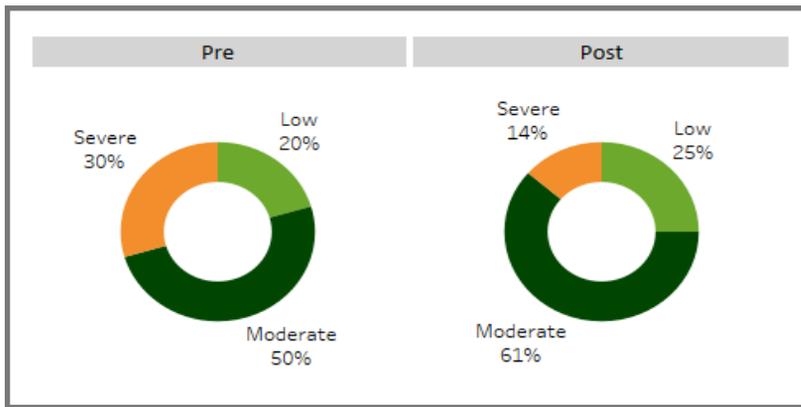
N = 44

Cohorts 2 and 3 said their mental health worsened due to the pandemic, and 36 percent reported worse mental health because of the wildfires. Some spoke openly about their mental health struggles, saying that the program helped them develop new strategies for coping with distress. For example, a 19-year-old female YP said:

> I was feeling terrible every single day…. But it's not something my mom would ever talk about. She's like, "Oh, why are you sad? Your struggles are nothing compared to mine." One day I actually broke down and started crying in front of my entire family. I've never seen any of my family cry, and that was the first time they'd ever seen me cry. I guess my biggest takeaway is just to take care of myself and that, if I need to talk to someone … I can and I should.

When asked in exit interviews if they would be willing to seek out mental health services if they were

Cultural Connectedness

In comparison to pretest scores, average posttest scores of *cultural connectedness* increased from 17.7 to 18.6, a difference that was statistically significant at $p < .01$. The participants also showed a significant increase in average *cultural protective factors* scores, from 6.9 to 8.1.

Many YPs reported in interviews that the program increased their sense of cultural connectedness, even though the interview protocol did not include any questions asking for this information. For example, 97 percent of YPs said they felt deeply supported and inspired by the LSP staff, who encouraged them to grow, take healthy risks, and practice self-care. Over half (65 percent) said that being around Latinx peers helped them feel less culturally isolated. One respondent noted:

> As a person of color I realized, why are most of my teachers White? And my friends, they're White. I don't have a lot of friends that are Latino. With LSP I found a place where I can relate to others, and they understood what it meant to be Latino. And the majority are first-generation, so it was very helpful. LSP reunites people who thought they were by themselves, and they get that confidence and go out into the community and express that confidence to others.

Another 35 percent spoke about the fact that their bilingualism improved due to working with LSP staff and peers to deliver presentations or host tables at community events in Spanish. Some spoke about a feeling

of belonging and purpose in being able to speak Spanish while educating or serving the Latinx community, especially when parents or elders were present:

> I learned Spanish when I was younger, but then I tried to hide it because I felt like I shouldn't speak it, like it was wrong. But with this, I felt really empowered speaking Spanish because I can help people. I understand their needs, and I'm able to communicate with them better.

Career Development

Using grounded theory, we identified primary themes and subthemes related to career development. Table 2 shows the themes across all three cohort years.

All YPs said they developed at least one professional skill by participating in the program. Most reported having developed multiple skills simultaneously, with interpersonal communication as the most commonly cited set of skills developed. Many interviewees said the program gave them many opportunities to find their voice and created safe spaces for them to leave their comfort zone and build new relationships with peers or with adults from partner agencies. The second

most frequently cited set of skills was public speaking and presentation skills, most likely developed through the presentations and *pláticas* participants facilitated.

Interviewees were asked about their career interests and whether their interests changed during the program. Nearly half (46 percent) stated that they intended to pursue a mental health career, naming such professions as clinical psychologist, clinical social worker, and family therapist. As shown in Table 2, well over half of those respondents said they decided on a mental health career during the program; the rest had previously decided to pursue mental health. One 17-year-old participant said:

> I definitely feel that the program inspired me to pursue a career in mental health. Before I thought that there were only specific and limited careers I could go into, but now I see that it's a very broad topic with a lot of career opportunities.

Forty percent of respondents said they were not sure of their educational or career path. Most of those said they were considering an educational pathway that could lead to a career in mental health. A small

Table 2. Career Development Themes in Exit Interviews

Primary Theme	Subtheme	% YPs
Workforce skills	Strengthened at least one workforce skill	100%
	Interpersonal communication skills	
	Public speaking and presentation skills	68%
	Job-seeking skills	38%
Career interests	Intends to pursue mental health career	46%
	Decided before program	20%
	Decided during program	26%
	Unsure, still exploring	40%
	Unsure but open to higher education that may lead to mental health career	31%
	Originally interested in mental health career, but changed mind by the end of the program	9%
	Intends to pursue another career (not mental health)	14%

N = 54

group of respondents (9 percent) were initially interested in a mental health career but changed their mind. They may have decided that the field was not a good match for them when they heard from professionals about the challenges, such as heavy workloads and the difficulty of working with people who have experienced trauma.

Another 14 percent of respondents said they intended to pursue an entirely different career, such as law, construction, or engineering. Many mentioned that they enrolled in the program for personal reasons and not because they intended to pursue a career in mental health.

Discussion
Psychological Wellness and Cultural Connectedness

The compounded traumas of wildfires, the pandemic, and political unrest during the study years made it challenging to measure the program's impact on psychological wellness. Still, the decreases in levels of psychological distress that emerged from survey data may be attributed to the YP Internship program's robust mental health training component. This training may have influenced participants' attitudes toward mental health services: 80 percent indicated that they would be willing to seek mental health services, and 84 percent actually did so when free services were offered.

"*La cultura cura*"—that is, culture cures. A person's well-being depends on belonging and cultural connectedness, which can be expressed through language, food, arts, spiritual traditions, and other realms. Our pre-post survey showed significant improvements in cultural protective factors and cultural connectedness across all cohorts. Interview data corroborated the connectedness finding, with nearly all respondents saying they felt strongly connected to LSP staff and over half expressing a strong connection with peers. This success was predicated on the fact that LSP both employed staff who identified as Latinx and cultivated partnerships with Latinx leaders who acted as mentors and role models. The YPs felt seen and encouraged by staff who looked like themselves and came from similar backgrounds; this sense of belonging built their confidence. Our findings affirm Stanton-Salazar & Spina's (2003) research showing

> Many interviewees said the program gave them many opportunities to find their voice and created safe spaces for them to leave their comfort zone and build new relationships with peers or with adults from partner agencies.

that nonfamilial adult mentors are a critical factor in helping young people succeed.

The gains in cultural protective factors and cultural connectedness may help explain the improvements in YPs' psychological wellness, particularly the significant decrease in feelings of worthlessness. These findings support the notion that a youth development framework that not only fosters racial and ethnic identity development (Erbstein & Fabionar, 2019) but also infuses cultural practice and indigenous knowledge has a positive impact on youth mental health.

Fostering Interest in Mental Health Careers

More than one-quarter of participants became interested in mental health careers during the YP Internship program. This finding suggests that the YP model can provide a structure for a much-needed mental health professional pipeline and is a promising strategy for fostering the future bilingual-bicultural mental health workforce. More research is needed to determine how many YP graduates go on to secure degrees in mental health or related fields and how many become licensed clinicians or providers in the community.

Limitations

Challenges with evaluation, staff capacity, and infrastructure should be taken into consideration when looking at the findings of this study. LSP had a small sample of 56 participants and fewer than 20 matched samples per cohort. Although the sample size is low, results show effectiveness is high. Organizations interested in replicating this model will need to consider issues related to efficiency.

Furthermore, the findings related to gains in workforce skills should be interpreted with caution as a snapshot in time. Young people naturally gain professional skills and confidence as they mature or are trained in new skills during their high school and college years.

Lessons Learned

OST professionals who are interested in bolstering youth mental health outcomes and nurturing the next generation of bilingual mental health providers may

consider adopting a YP model. Those who choose this path may benefit from the following recommendations based on LSP's experience.

First, secure a long-term source of funding. LSP had funding for four years, which helped with program stability and staffing continuity. This continuity led to strong name recognition among Latinx youth in Sonoma County; participants frequently talked about the program and recruited friends and family members. By the end of the first four years, the program had more applicants than open spaces.

Second, recruit and train staff who identify as the same race/ethnicity and other identities as the YP participants. Then participants can see themselves represented in leadership roles; staff can act as mentors for self-expression, goal setting, and cultural pride.

Third, intentionally cultivate partnerships with mental health leaders to deliver mental health training. Ideally, these leaders should share the participants' racial/ethnic or other identities to demonstrate to participants that they, too, can pursue and thrive in mental health careers.

Fourth, plan for growth. In years 2 and 3, the number of YPs grew, but the staff did not, and the infrastructure, such as meeting space and technology, remained the same. OST programs should make sure program growth is aligned with staffing and infrastructure capacity.

Fifth, design for evaluation. OST programs considering using a YP model with historically marginalized groups should consider using a community-based participatory research approach to evaluation, especially in the context of ongoing crisis and traumas. LSP found that this approach allowed it to balance fidelity with flexibility and to make consistent program adaptations. OST organizations that are new to evaluation, as LSP was, can seek support and technical assistance from evaluation experts who understand the nuances of working with the target populations.

OST programs that work with historically marginalized youth, employ staff that match the demographics of participants, and are well connected to mental health resources are uniquely positioned to support participants to recognize the risks and assets linked to their mental health and well-being. Such programs can simultaneously, as the YP Internship program did, address career readiness, exposing youth to mental health professionals and career pathways and thereby nurturing the future bilingual-bicultural mental health workforce.

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Emotional Intelligence and Workplace Stress Among Afterschool Supervisors in Low-Income Communities

Sonia M. Toledo

Afterschool supervisors are responsible for managing their teams, building curricula, maintaining relationships with parents and community partners, solving crises, and implementing the latest trends in 21st century learning, all of which can create a high-stress work environment (Kremer et al., 2015).

High levels of stress among supervisors can diminish afterschool program quality and negatively affect the learning and development of children and youth (Geisinger, 2016). Highly stressed afterschool supervisors may not be able to effectively enhance underserved children's social and emotional development (Frazier et al., 2019). One solution may be training in emotional intelligence. In other fields, high emotional intelligence among leaders was found to mitigate workplace stress and to increase job productivity, job satisfaction, and attainment of positive results (e.g., Lumpkin & Achen, 2018).

My study helps address the lack of scientific research on the role of emotional intelligence in afterschool supervisors' ability to manage stress at work. In this quantitative correlational study, I investigated the relationship between the emotional intelligence of afterschool supervisors serving low-income communities in New York City and their perceived workplace stress. I found a negative correlation—that is, supervisors with higher emotional intelligence tended to have lower workplace stress. The results can

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help afterschool supervisors and organization leaders understand the importance of emotional intelligence for effective program management. Equipped with that understanding, they can identify resources supervisors need to manage their workplace stress, facilitate 21st century learning, and mitigate the effects on youth of adverse environments.

Conceptual Framework and Literature Review

Daniel Goleman's (1995) emotional intelligence theory provided the guiding conceptual framework for this study. Goleman's theory demonstrates the importance of managing emotional responses in any environment to benefit the individuals in any relationship (Anand, 2019). The five developmental skills of emotional intelligence in Goleman's formulation are self-awareness, self-regulation, motivation, empathy, and decision-making (Goleman, 1995). Emotional intelligence begins with the awareness of one's emotions (Patti et al., 2015); together, self-awareness and social awareness make up emotional awareness, according to Knights et al. (2020).

This study builds on literature showing that young people, particularly those growing up in disadvantaged environments, need emotional intelligence skills to grow and thrive. In order to foster emotional intelligence in children, the adults around them must themselves have strong emotional intelligence. Furthermore, emotional intelligence has been shown to help leaders manage workplace stress, an ability that can improve their effectiveness.

Emotional Intelligence in Afterschool

Afterschool programs are vital for developing children's social and emotional competence and fostering positive developmental outcomes. By developing 21st century skills, they help to create opportunities for children and youth in low-income communities and low-performing schools (Wade, 2015). Young people who attend afterschool programs in economically vulnerable urban communities often exhibit emotional and social dysfunctions; youth practitioners may serve as the first line of defense (Farrell et al., 2019). O'Hare et al. (2015) found that developing children's social and emotional skills in afterschool helps mitigate socioeconomic disadvantages in low-income communities. However,

many afterschool programs struggle to provide youth with tools to help them thrive (Frazier et al., 2019).

An important element in the quality of afterschool programs is the capacity of afterschool practitioners to handle stress and deliver results in a fast-paced environment (Farrell et al., 2019; Larson, 2018). Staff members' inability to handle the stress that comes with the pressure of meeting developmental demands is a big concern in programs in disadvantaged communities (Pelcher & Rajan, 2016). To increase the quality of afterschool programs in vulnerable communities, supervisors need to focus on creating socially and emotionally safe environments where children can feel comfortable to express themselves, ask questions, and learn new things (Frazier et al., 2019). The stress of meeting developmental goals can be alleviated by creating a supportive environment for children that facilitates social and emotional learning, helps them make decisions, and fosters opportunities for collaborative learning (St. Clair & Stone, 2016).

To develop emotional intelligence in children, educators and youth professionals need to practice emotional intelligence themselves (Brackett et al., 2019; Pelcher & Rajan, 2016). They must have strong emotional foundations in order to meet the social and emotional needs of children and youth (Akiva et al., 2016; Hurd & Deutsch, 2017). When the emotional intelligence needs of supervisors are met, they can, in turn, train their staff to establish and maintain a healthy social and emotional culture among young people (Hurd & Deutsch, 2017). Developing emotional intelligence in youth practitioners does not happen by accident—it must be intentional (Geisinger, 2016). Supervisors must persistently develop staff members who work with children and youth directly to produce positive social and emotional outcomes (Geisinger, 2016).

Emotional Intelligence in the Workplace

Research on emotional intelligence among supervisors in the afterschool field is so limited as to be almost nonexistent. Research in K–12 school settings has established a direct positive relationship between the emotional intelligence of teachers and their understanding of students' emotional needs (Zurita-Ortega et al., 2019).

Most research on emotional intelligence in the workplace has focused on business leaders. Various

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researchers have identified emotional intelligence as key to leadership development (Barreiro & Treglown, 2020; Dirican & Erdil, 2019; Lemisiou, 2018). Emotional intelligence has been included, along with technical, critical reasoning, and math skills, among the skills essential to the success of 21st century organizations (Knights et al., 2020). O'Connor et al. (2017) concluded that individuals with high emotional intelligence are positive and adaptable. Effective leaders with high emotional intelligence know how to mobilize their subordinates by building strong relationships (Edelman & van Knippenberg, 2018). They can solve problems and manage crises because they understand their own emotions and the emotions of others (Edelman & van Knippenberg, 2018).

Emotionally intelligent leaders not only control their own emotions but also teach others to do the same, encouraging them to be creative and work independently (Hoffmann et al., 2020; Nadler et al., 2020; Papoutsi et al., 2019). Leaders who are self-aware and socially aware use their emotional intelligence to build relationships, manage stress, and stay grounded when they encounter problems at work (Mateia, 2019). Effective leaders develop trusting relationships that cultivate a positive environment for everyone, giving them a sense of emotional safety, facilitating growth, and, ultimately, enabling achievement of common goals (Lumpkin & Achen, 2018; McCauley & Palus, 2020).

Bakker and de Vries (2020) emphasize the importance of providing emotional intelligence training to avoid employee burnout. Specifically, emotional intelligence has been associated with the ability to manage workplace stress (Carrillo et al., 2018). For example, Rakhshani et al. (2018) found that emotional intelligence training significantly reduced workplace stress among nurses. Many companies therefore prioritize emotional intelligence training for leaders and staff (Carrillo et al., 2018).

Methodology and Design
I used a quantitative correlational methodology with a nonexperimental research design to investigate the relationship between afterschool supervisors' emotional intelligence and their perceived workplace stress.

> Emotionally intelligent leaders not only control their own emotions but also teach others to do the same, encouraging them to be creative and work independently.

Study Participants
I recruited study participants by contacting a convenience sample of 10 youth organizations funded by the New York City Department of Youth and Community Development. Most organizations that serve low-income communities in New York City operate their afterschool programs in public schools or in public housing community centers. A total of 92 afterschool supervisors between the ages of 25 and 65 were recruited for this study.

Measures
The study participants responded to two self-assessment instruments: the Trait Emotional Intelligence Questionnaire-Short Form and the Perceived Stress Scale.

Trait Emotional Intelligence Questionnaire
The Trait Emotional Intelligence Questionnaire (TEIQue) has been extensively validated for academic research studying emotional intelligence (Petrides, 2020). I used the 30-question short form (TEIQue-SF) to assess overall emotional intelligence and four first-order factors:

- **Well-being**. Individuals with high well-being experience physical, mental, and emotional wellness. They can focus on their state of mind and know how to get back to being positive, happy, and fulfilled. Individuals with low scores tend to have low self-esteem, be easily disappointed, and lack confidence in communicating with people from diverse backgrounds (Petrides, 2020).
- **Self-control.** Individuals with good self-control can control their impulses and are good at regulating external pressures and stress. They are neither introverted nor excessively animated when they express themselves. People with low self-control tend to be impulsive and have difficulty managing stress (Petrides, 2020).
- **Emotionality.** Individuals with high emotionality can perceive and express emotions to develop and sustain quality relationships. Individuals with low emotionality find it difficult to regulate their internal emotional states and to express their feelings to others (Petrides, 2020).
- **Sociability.** Individuals with high sociability are aware of their social relationships and how they influence others. They take agency in social

environments by observing the social energy before they contribute. Individuals with low sociability may struggle with accepting differences and react toward anyone who has a difference of opinion (Petrides, 2020).

The four first-order factors of emotional intelligence measured by TEIQue-SF align with Goleman's (1995) five developmental skills of emotional intelligence:

- Well-being requires individuals to have *self-awareness* and understand their own needs.
- Self-control contributes to the ability to *self-regulate, self-motivate,* and *make decisions.*
- Emotionality requires individuals to know their own emotions and have *empathy* for others.
- Sociability supports individuals in building healthy relationships by influencing and *motivating* them to act toward a common goal.

TEIQue-SF participants respond to statements on a Likert scale from 1 to 7. The results also range from 1 to 7, with 1 indicating low levels of emotional intelligence and 7 indicating high levels (Petrides, 2020). Here are samples of TEIQue-SF statements:

- "Many times, I can't figure out what emotion I am feeling."
- "I am usually able to influence the way other people feel."
- "Generally, I am able to adapt to new environments."
- "I normally find it difficult to keep myself motivated."
- "I often find it difficult to adjust my life according to the circumstances."

Perceived Stress Scale

Workplace stress was measured using the Perceived Stress Scale (PSS), which was validated by Ezzati et al. (2014). Using a five-point Likert scale, participants indicated their level of agreement with each of 10 statements related to the stress they experienced at work during the previous month**.** For example, the PSS asks how often respondents felt that difficulties were piling up too high to overcome or that they were unable to control the important things in their life.

Research Question

The following research question guided this study: To what extent, if any, does emotional intelligence or one of its four first-order factors (well-being, self-control, emotionality, and sociability) predict the perceived workplace stress of afterschool supervisors?

Data Collection and Analysis

The emotional intelligence of supervisors, as measured by the TEIQue-SF, was treated as an independent variable and their perceived workplace stress, as measured by the PSS, as a dependent variable. The objective was not to determine causality but to look at the correlation between the variables (Privitera, 2020).

I used a statistical power analysis software package to calculate the minimum sample size needed to produce meaningful results, finding that I needed to recruit at least 81 supervisors. In March 2021, I administered the two surveys online to the 92 supervisors from 10 youth-serving organizations who agreed to participate. After the data were cleaned, 87 responses remained, more than enough to produce valid results.

Findings

Correlating the TEIQue-SF data and the PSS data showed that supervisors who scored high in emotional intelligence tended to score low in perceived workplace stress. The negative correlation between the total TEIQue-SF emotional intelligence score and the PSS stress score was statistically significant ($p < .05$). Furthermore, all first-order TEIQue-SF factors—well-being, self-control, emotionality, and sociability—also demonstrated negative correlation with perceived stress, though the correlation was statistically significant only for well-being and self-control.

The next level of analysis involved investigating possible cause-effect relationships—that is, whether participants' PSS scores could be predicted by the global emotional intelligence score or any of the four factor scores. The results show that one of the four factors, self-control, was indeed a predictor of the supervisors' perceived workplace stress.

Implications

The findings that emotional intelligence correlated with lower stress and that self-control was a predictor of lower workplace stress could be a starting point for exploring how to support the development of afterschool supervisors' emotional intelligence and enhance their ability to manage their stress. The findings suggest that afterschool supervisors who were self-aware and able to regulate their emotions were able, as Knights et al. (2020) and Patti et al. (2015) suggest, to deal with the stress in their work environment.

This finding matters because a first step in improving outcomes for program participants is improving the emotional intelligence of supervisors.

Afterschool practitioners in disadvantaged communities need strong emotional intelligence to meet the social and emotional needs of the children in their programs (Brackett et al., 2019; Hurd & Deutsch, 2017). Afterschool supervisors, in turn, need emotional intelligence to foster employees' emotional intelligence while coping with their own stress (Carrillo et al., 2018; Hoffman et al., 2020). Research in other fields has shown that emotionally intelligent leaders can improve outcomes for themselves, their staff, and their work (Hoffman et al., 2020; Nadler et al., 2020; Papoutsi et al., 2019) and that training can improve emotional intelligence (Carrillo et al., 2018; Rakhshani et al., 2018).

The findings of this study are particularly timely in the wake of the COVID-19 pandemic. A return to the way things were done before the pandemic is not acceptable. No one will be well served by perpetuating the educational disparities that were in place before, and were exacerbated by, the pandemic and its restrictions. Policymakers and other leaders must act on many fronts to combat inequities in education. One such front is emotional intelligence training in afterschool programs. Educators who have not dealt with their own pandemic-induced trauma and emotional stress are not likely to be able to help program participants with their trauma and stress.

Recommendations for Practice

Decision-makers can incorporate the results of this study into long-term planning to improve the quality of afterschool programs in low-income communities. Improving afterschool supervisors' emotional intelligence and teaching them to develop emotional intelligence in staff members and program participants requires an intentional approach and significant resources. This study suggests that training focused on self-control may be a good first step to help supervisors cope with their workplace stress. Seminars and retreats that focus on emotional well-being for all employees who work with children should also be considered. In the longer term, practices to improve the emotional health of afterschool supervisors and staff may include extended vacations, mental health services, resources for continuous learning, and periodic check-ins for

general well-being. Policymakers and organizational leaders need to understand that investment in supervisors and line staff is critical to producing positive youth outcomes.

Recommendations for Future Research

There are myriad opportunities for future research on emotional intelligence in afterschool. A first step might be to replicate my study using larger samples of supervisors from various parts of the country to provide generalizable results. Such studies could identify the predictors of emotional intelligence and workplace stress among afterschool supervisors. The results could help policymakers and youth organization leaders decide how to support the development of emotional intelligence among afterschool supervisors and staff. Any evidence-based practices uncovered could be incorporated into new professional development initiatives and could guide future research.

In addition, qualitative studies could explore how afterschool supervisors think, what they feel, and what experiences they go through. Results, perhaps combined with findings from case studies, could guide development of training programs to improve supervisors' emotional intelligence and help them mentor frontline staff. Later studies could explore the impact on afterschool program quality. Further quantitative quasi-experimental studies could explore the impact of emotional intelligence resources on the capacity of afterschool supervisors to address program participants' social and emotional needs. All this work could benefit from attention to studies of emotional intelligence done in other fields, such as K–12 education and healthcare.

Emotional Intelligence and Program Quality

The results of the study demonstrate that afterschool supervisors in low-income New York City communities who had higher emotional intelligence had lower perceived workplace stress. Self-control was a direct predictor of supervisors' perceived stress in the workplace. These findings can help the field craft strategies to support supervisors in developing emotional intelligence. By reducing workplace stress

> This study suggests that training focused on self-control may be a good first step to help supervisors cope with their workplace stress

and enabling supervisors to mentor direct service staff, efforts to improve supervisors' emotional intelligence can be expected to enhance program quality.

The study is particularly relevant as the education system recovers from the COVID-19 pandemic. To help children in low-income communities recover from their pandemic-induced trauma and make up for their learning loss, afterschool practitioners need first to deal with their own trauma and then to develop skills to support children's social and emotional development. This need existed before the pandemic and is even more urgent now. Emotional intelligence training for supervisors is one step toward addressing the academic and social and emotional needs of children in disadvantaged communities.

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How Clean Is My Water?

A Culturally Responsive, Project-Based Interdisciplinary Summer Camp

Alma D. Stevenson and Shelli L. Casler-Failing

During recent decades, educational reform in the U.S. has favored standards-driven curricula with the purpose of improving education. However, national assessments have not demonstrated significant improvements in educational outcomes, especially among economically disadvantaged and minoritized populations (Hussar & Bailey, 2017).

To mitigate these outcomes, youth-serving organizations provide children from these populations with out-of-school time programs to enhance their academic and social skills (see Hirsch, 2011; Springer & Diffily, 2012). Many such organizations have focused on learning opportunities in STEM to support "youth in their intellectual, social, and emotional development" (National Research Council, 2015, p. 11).

As professors who believe in partnering with nonprofit organizations that offer quality afterschool programs, and in keeping with our university's commitment to community outreach, we contacted the directors of our local Boys & Girls Club to discuss how we could collaborate to meet their academic goals. We wanted both to cultivate connections with the club and to develop opportunities to provide

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afterschool instruction that embodied culturally responsive, project-based teaching. After listening to the directors' views of the club's needs, we decided to design and implement a one-week summer science camp for students entering grades 4–7. We created an instructional unit that integrated literacy and mathematics into a science unit focused on water quality and related environmental issues; we also planned to explore student outcomes. The interdisciplinary project-based instructional unit we designed focused on culturally responsive practices. For example, the readings included individuals from diverse backgrounds, the water samples used in lab experiments were gathered from students' neighborhoods, and discussions about water preservation helped students empathize with the struggles of other young people around the world. Through these practices, students developed awareness of environmental issues and increased their understanding and use of scientific vocabulary related to water quality.

Framing the Program

Minoritized populations are underrepresented in STEM fields (National Science Foundation, 2017). The National Research Council (2012) has framed science education as a cultural endeavor in which interaction and collaboration are highly regarded. This approach favors inclusive instructional strategies and curricula that focus on students' sociocultural and experiential backgrounds (Gay, 2018; Ladson-Billings, 2014). In our culturally responsive, project-based inter-disciplinary unit, students investigated real-world questions relevant to their community. We used pedagogical approaches grounded in social constructivism, culturally responsive pedagogy, project-based learning, critical literacy, and multimodality.

Based on Vygotskian (1978) social constructivism, in which learning is seen as a social process, we enabled students to learn through interaction and to use language to enhance their academic cognition. Students had multiple opportunities to work collaboratively during science labs and paired projects.

A culturally responsive instructional approach that placed their cultures and experiences at the center of the curriculum (Gay, 2018) gave students equitable opportunities to learn. This pedagogical approach followed Ladson-Billings' (1995) tenets for culturally relevant instruction: focusing on the students' academic success while preserving their culture and developing their critical consciousness. The project placed students "at the center of the learning orbit and turn[ed] their personal interests and strengths into opportunities for academic success," following the principles of culturally responsive teaching (Gay, 2018, p. 61).

Culturally responsive teaching is aligned with project-based learning, which "is sensitive to the varied needs of diverse students with respect to culture, race, and gender" (Krajcik & Czerniak, 2014, p. 5). Project-based learning promotes a culture of belonging and a sense of identity when students engage in common activities that seek responses to a mutual problem (Penuel et al., 1999). The approach incorporated small-group interactions, collaborative learning, interesting tasks, group discussions, and daily reflections. The multidimensional curriculum incorporated high but obtainable expectations, which students achieved by using their experiences and cultural resources to advance their knowledge and skills, following Gay's (2018) principles.

Culturally responsive pedagogy is interconnected with critical literacy based on Freire's (1970/2000) perspective of literacy for empowerment. Pedagogical approaches based on critical literacy promote students' critical thinking skills, develop their awareness of their socioeconomic context, enable them to question relations of power or social inequality, and support them in becoming agents of social change (Freire, 1970/2000). The students in our summer camp participated in activities that challenged their literacy and critical thinking skills in a nonthreatening way. For example, they were not critiqued on inaccuracies but instead were praised for their contributions and were encouraged through purposeful questioning to write more and think more deeply.

Because students were at different grade levels and had different cultural backgrounds, we offered them multimodal opportunities to demonstrate their understanding, following the recommendation of

> This pedagogical approach followed Ladson-Billings' (1995) tenets for culturally relevant instruction: focusing on the students' academic success while preserving their culture and developing their critical consciousness.

Kress (2010). Students could communicate and make meaning using various modes—speaking, writing, body language, audio recordings, and visual images or recordings—based on their experiential and cultural background, as recommended by Gay (2018) and Ladson-Billings (2014).

Program Context

The culturally responsive, project-based interdisciplinary science camp we designed and implemented at our local Boys & Girls Club focused on testing local surface and groundwater samples and on researching water pollution. Our purpose was to develop students' interest in their environment and to nurture positive attitudes toward science learning. The unit's guiding research question was, "How does the water quality compare in different parts of town?" That question had two sub-questions: "How does surface water quality differ in various communities within our town?" and "How does tap/groundwater from different suppliers in our town compare?"

The program was conducted four hours a day for five days during one week in summer 2019. The curriculum included culturally relevant picture books and a graphic novel about water, science lab experiments on local surface and groundwater samples, math activities based on the findings from the labs, and whole-group discussions. Various types of journal writing, including freewriting and framed paragraphs, encouraged students to reflect on their learning and practice new vocabulary. Students worked collaboratively to research water quality, design posters on preventing water pollution, and create bar graphs to display the results of their lab tests. At the end of the unit, student pairs created and videotaped a newscast reporting on one of the local water sources to demonstrate their learning and apply their new vocabulary.

We made the project culturally relevant by applying the content to places and situations with which the students were familiar. They all knew the locations of the ponds and creek that supplied the surface water samples. They learned that at least three different entities supply tap water in their town. Furthermore, relevant readings offered our diverse students opportunities to see themselves represented in the texts and learn about other people's cultures and lives (Bishop, 1990). Students also engaged in daily discussions in which they expressed their opinions and developed their critical literacy skills and agency

Culturally Responsive Practices in the Summer Camp

To connect program content with students' interests and cultures, we:

- Identified students' strengths and cultural backgrounds

- Set high expectations with challenging but attainable activities

- Reviewed material from previous days and previewed each day's agenda

- Used multimodal instructional practices to make concepts accessible to all students

- Used writing and drawing prompts based on personal experiences and prior knowledge; focused on content rather than execution

- Selected readings that reflected children's experiences and provided avenues into others' experiences

- Asked purposeful questions to connect the readings and lesson concepts to personal experiences

- Provided scaffolding and opportunities for student collaboration

- Cultivated students' awareness of their surroundings and resources as a way to promote critical thinking

- Connected readings and discussion topics to students' personal experiences and to issues affecting them and their communities

- Designed lab experiments around water samples from students' own neighborhoods

- Developed students' self-awareness and motivation to become agents of change

- Facilitated a culminating task in which students applied their personal experiences and expressed their opinions and concerns

as citizens concerned about water quality. See the box on this page for a list of culturally responsive practices embedded in the week-long instructional unit.

Participants

This study was conducted in a rural southeastern U.S. town at a local Boys & Girls Club. The ten student participants in the weeklong summer camp program were rising fourth to seventh graders, ages 8 to 14. Six students, four male and two female, were African American; four students, all male, were Caucasian. All attended schools in the same public school district. The club unit director, using convenience sampling, selected the participants from among children who were scheduled to attend the club during the entire week of the camp. All students signed research assent forms, and parents also consented.

Conducting the Program

As university researchers specializing in literacy and mathematics, we designed and implemented the summer science camp and evaluated its outcomes. Together, we have 16 years of experience as elementary and middle school teachers. We have created and implemented extracurricular programs and summer camps that incorporate culturally responsive literacy pedagogical approaches in science, mathematics, and multicultural literature to advance minoritized students' reading and writing skills. In this section, we describe the program as we implemented it, day by day.

Day 1: Background Knowledge

On Day 1, after introductions, we explained the objectives and content of the unit to the students and outlined the week's activities. To build the students' academic competence, based on their strengths, we had them fill out an anticipation guide and a brief vocabulary pre-test. The anticipation guide asked students to agree or disagree with statements such as "The amount of water on Earth has not changed since before the dinosaurs lived" and "All tap water, regardless of the source, is the same"; they then had to explain their reasoning. This document, together with the vocabulary test, helped us understand what the students knew and needed to learn about water.

Next, we asked students to freewrite about water for three minutes. This activity prompted a discussion

> We made the project culturally relevant by applying the content to places and situations with which the students were familiar. They all knew the locations of the ponds and creek that supplied the surface water samples. They learned that at least three different entities supply tap water in their town.

about the origins of water, what constitutes drinking water, and sources of water in different parts of town. We introduced the first vocabulary words, *groundwater* (equivalent to *tap water*) and *surface water.* Then a facilitator read aloud to the class *One Well: The Story of Water on Earth* (Strauss & Woods, 2007). This picture book explains the origins of water, the water cycle, and the amount of water needed by living things. It encourages readers to conserve water by showing how everything on Earth is interconnected. The book's illustrations of farmland created a connection with students in this rural town. The next activities made more connections with the book: Students drew maps depicting local water sources and answered questions such as "What surprised you about this book?" and "Why did you visit the body of water that you drew a map of in your journal?"

Then students participated in a brief experiment in which they tasted three samples of drinking water: tap water, purified water, and bottled spring water. They completed a chart to summarize their tasting experiment and wrote a reflection in response to guiding questions. Before the end of the session, we gave the students empty water bottles and asked them to bring a sample of surface water from a location near their home for the next day's activities. This task made the project even more relevant and helped to activate students' curiosity.

Day 2: Pollution and Surface Water Testing

On Day 2, after asking students for their questions from the previous day, we introduced the day's topic, water pollution. We started with vocabulary: *bacteria, contaminants, dissolved oxygen, pH,* and so on. Having made sure students understood the vocabulary, we conducted an interactive read-aloud using *Water, Water, Everywhere! Stop Pollution, Save Our Oceans* (Pfiffikus, 2016). This age-appropriate book presents research-based information about the importance of water on Earth and describes the causes and prevention of pollution. Although the book does not have characters

Figure 1. Two Pollution Posters Created by Students

Figure 2. Students Testing the Water During a Lab Experiment

to guiding questions: "What did you learn about pollution? What are some ways that you can prevent pollution? What will you do on a day-to-day basis to minimize how much you pollute?" Then students worked in pairs to design a poster about pollution; two sample posters are in Figure 1. These activities helped students engage with new vocabulary before applying it in the day's lab, in which they began to test the surface water samples they had collected; see Figure 2. Because the students collected the water samples themselves from their own communities, the activity had relevance and purpose. The day ended with a brief group recap.

Day 3: Water Testing and Internet Research

After answering students' questions from the previous day, we introduced the Day 3 focus, researching surface and tap water. Students started the day by continuing the lab activity, testing the surface water samples they had brought from five different locations in town. Once all samples were tested, we divided the students into five pairs to generate bar graphs of the lab results. Each pair graphed the results of one test—turbidity, dissolved oxygen, phosphates, pH, or nitrates. Students read one another's graphs and then, as a whole group, compared the five surface water samples. They identified possible reasons for the dissimilarities among the samples in a conversation that sparked their awareness of the differences in the neighborhoods of their town.

with whom students can connect, the illustrations showed sights they might see around town, such as culverts, waterways, and roadsides littered with garbage. To develop students' critical thinking skills and awareness of the importance of stopping pollution, we asked questions that connected the reading with their personal experiences: "Have you ever noticed any garbage on the ground when you were walking down the street or riding in a car? Is the garbage you saw a form of pollution? How can it affect our water?"

After the reading and discussion, we had students write in their journals for about five minutes in response

Next was a group reading of the graphic novel *The Surprising World of Bacteria with Max Axiom, Super Scientist* (Timmons et al., 2013). Max Axiom, a Black scientist with superpowers, is committed to making learning science fun and accessible for all children. He presents a positive role model for all students, but especially for students of color. His scientist colleagues represent diverse populations. The students expressed

interest in this graphic novel because it is like a comic book, a genre that appeals to many tweens and teens. The illustrations facilitated students' understanding of the story's content.

We finished the day by pairing students to do internet research, using a list of websites we provided, on one of two topics: our state's surface water or our town's drinking water. Figure 3 shows one student doing this research. After they finished researching and taking notes, students completed a paired writing
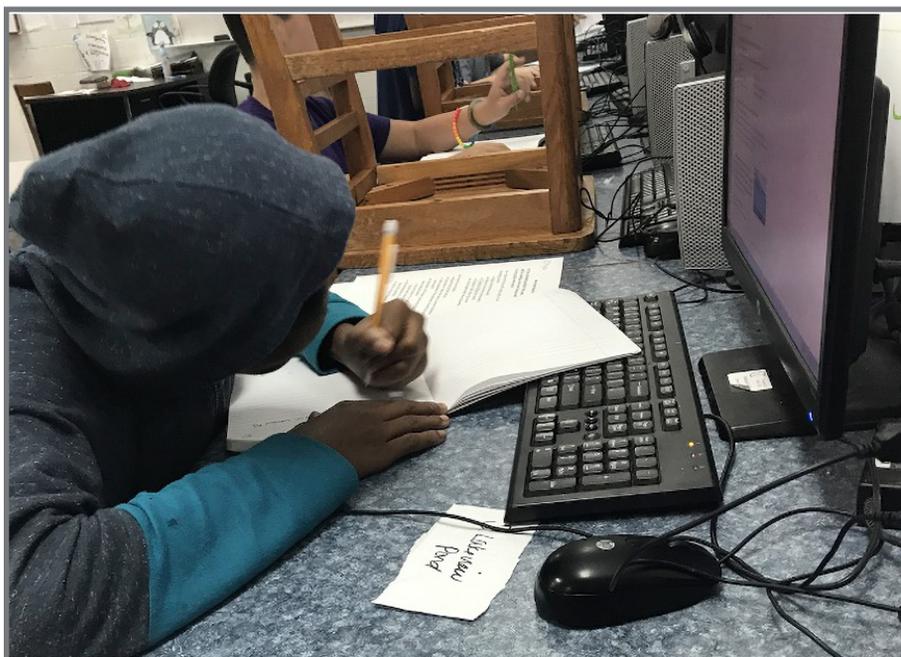
Figure 3. A Student Conducting Internet Research on Local Water Quality

activity connecting their observations, the lab results, the day's reading, and their own experiences. We encouraged students to use the day's vocabulary words in their explanations.

Day 4: Groundwater Testing and Putting it All Together

As we did each day, we began Day 4 by asking for questions from the previous lessons; this practice was one of the ways we supported students to achieve success. Then we introduced students to the day's topic: testing groundwater. Students performed the same lab tests they did on the surface water samples with tap water from three water suppliers in town: the municipal water supply and two wells managed by different water companies. Once again, using water samples from the students' communities created a

personal connection to the learning. We made clear to the students that tap water in our town is obtained from groundwater resources.

Once the students finished the lab tests, they completed a data sheet that required the same information as for the surface water samples. They then compared their surface water and tap water results, making informed comparisons as they responded to questions such as "Which sample(s) would you prefer to drink? Explain." Later, they looked at surface and tap water samples under a microscope. Then they wrote in their journals their conclusions about levels of contamination in the surface and tap water samples and which sources would be more likely to contain bacteria and so be less safe to drink. One writing prompt required them to make a personal connection: "What did you learn about today that can affect the water in our community?" Once they finished writing, the students shared their thoughts with the whole group.

Finally, the students watched two videos—a news report about drought in our state and a video about local pollution—and read aloud *The Water Princess* (Verde & Reynolds, 2017). This book, based on the childhood of African model Georgie Badiel, illustrates the hardships she endured as a young girl in order to get fresh water. The videos and book prompted a discussion about water preservation and helped the students develop awareness of and empathy toward the struggles of young people their age from another part of the world. Students verbalized the need to conserve water because water is necessary for all people around the world. We ended the day by talking about the final project. We asked the students to write a comprehensive reflection putting together what they had learned in the four days so they could develop ideas for the newscast they would create the next day.

Day 5: Final Project and Wrap-Up

On the last day of the camp, students completed the anticipation guide they had started on the first day of the camp. We found that some of their answers had changed; for example, more students now disagreed that "All tap water…is the same." We also administered a vocabulary post-test.

Immediately thereafter, we paired students to write scripts for their final project: a video newscast. We provided clear guidelines; for example, the newscasts were to focus on one of the surface or tap water sources, needed to be at least 90 seconds long, and had to feature appearances by both partners. The students took turns going to a room to record their newscasts. As they waited their turn, the remaining students wrote in their journals about their experiences during the camp. After all the students finished their newscasts, we conducted a final group interview in which students shared their thoughts about the program. Then we celebrated with snacks and juice as students shared their news reports.

Program Outcomes

For this qualitative study, we analyzed, classified, and recursively coded the data we collected during the program using a naturalistic, interpretive approach (Denzin & Lincoln, 2005). Data were drawn from the anticipation guides, students' journal writings, student artifacts, and transcribed recordings of the whole-group discussions and final group interview. Data were reviewed independently by each researcher to determine emergent themes. Then correlations across the data were highlighted and further analyzed to expand upon emergent themes.

Quantitative data derived from the pre- and post-vocabulary assessments were analyzed to determine the accuracy of students' responses, which would provide evidence of students' understanding of the scientific definitions of the water quality terms. Three overarching themes emerged from the data: emergent awareness of environmental issues, engagement with program content, and vocabulary and concept learning.

Emergent Awareness of Environmental Issues

The students' interest in their environment, and specifically in water conservation, became evident during our Day 4 discussion of *The Water Princess* (Verde & Reynolds, 2017), in which the protagonist describes the hurdles she faced to obtain water for everyday use in a location in Africa. The students were shocked to learn that the protagonist was allowed to drink only a limited amount of water each day, even when the weather was hot. To help students connect to their own lives and to earlier readings, in keeping with research on culturally responsive learning (Gay, 2018; Ladson-Billings, 2014), we asked about the weather in our community. Thinking of the difficulties the Water Princess faced to obtain safe, clean drinking water, a student asked, "They boiled the water?" Students responded, "Yes, because she had to drink it." This conversation led to a discussion about contamination, pollution, and the water cycle in which students' understanding of water was connected to the Day 1 reading, *One Well: The Story of Water on Earth* (Strauss & Woods, 2007):

> *Facilitator:* We tested all these water samples, right? We found that surface water has contamination; it's polluted, OK? Does the contamination affect somewhere else or just here [in our town]?
> *Student 1:* That affects everywhere.
> *Facilitator*: Why?
> *Student 1:* Because all water comes from the same place.
> *Students, in unison:* The ocean.

One of our goals, guided by Freire's (1970/2000) concept of critical literacy, was to build students' critical awareness of the need to preserve water and stop contamination. Their critical awareness became evident in the discussion of pollution and was further reinforced when they watched the news report about drought in our state.

> *Student 2:* I know this person in our neighborhood who has the best grass … and he has all these sprinklers … and he even has water fertilizer, and that's bad.…
> *Student 3:* You can always take trash out of the water, clean the water.
> *Student 2:* I can tell the guy [with the best lawn] to stop using fertilizer.
> *Student 4:* You can make posters, too, in science, to convince people to stop putting fertilizer on the grass and stop putting trash in the water.
> *Student 5:* Stop pollution.
> *Student 6:* Turn off the faucet when you brush your teeth.

Students also demonstrated their awareness in the posters they created on Day 2. As they developed an interest in their environment, they acted as emergent agents of change (Freire, 1970/2000).

Engagement with Program Content

Throughout the program, students were enthusiastic and engaged during readings, group discussions, and science laboratory activities. In the final group interview, the students shared positive opinions about the week's activities. The collaborative work, which we based on Vygotsky's (1978) model, was particularly popular; the students said that they enjoyed the lab experiments: "Because they showed us a deeper explanation," said one student. Other students said, "I really like the experiments because they gave me knowledge of why the water on Earth is bad," and "I like when we did the experiments because I learned a lot." The students also said they liked creating the posters and graphs. They appeared to appreciate learning by doing. As one student said, "At school we just talk about it, and here we are actually getting into it."

The students expressed surprise at the amount of writing they did during the week. They said they felt proud that they knew what they were writing about. Of the readings, they favored the graphic novel, *The Surprising World of Bacteria with Max Axiom* (Timmons et al., 2013). They said that they would tell their teachers that graphic novels are "fun for kids to read!" as several students expressed.

Vocabulary and Concept Learning

During all activities, we encouraged and supported students to use the new content vocabulary so that they could become comfortable with and deepen their understanding of the terms. Thus, the program's instructional strategies not only developed the students' awareness of their environment, but also increased their scientific vocabulary. The average score on the vocabulary pre-test was 1.4 out of 10 words; on the post-test the average score was 6 words. Only one student mastered all 10 words, but all students scored better on the post-test than on the pre-test. Similarly, their responses to the anticipation guide demonstrated changes in their knowledge about water origins and preservation.

> The instructional approaches we used appear to have been effective in developing students' awareness of their environment and of their responsibilities as citizens in their communities. These approaches were also effective in developing scientific vocabulary.

Benefits of Culturally Responsive Project-Based Learning

The findings of this study corroborate the benefits of using culturally responsive, project-based interdisciplinary instructional approaches. These approaches were successful in our summer camp because students were able to interact and explore in a nonthreatening environment while looking to answer questions that were relevant to their lives and communities, as recommended by educational theorists (e.g., Gay, 2018; Ladson-Billings, 2014; Penuel et al., 1999). The instructional approaches we used appear to have been effective in developing students' awareness of their environment and of their responsibilities as citizens in their communities. These approaches were also effective in developing scientific vocabulary.

Furthermore, the students showed enthusiasm when reflecting on their experiences during the final group interview. When asked what they liked best about the week, students' responses included almost all the activities, particularly the experiments, posters, graphs, journal writing, and graphic novel. In other words, students enjoyed the hands-on aspect of this camp. One noted that, in school, students "normally read books and don't do much, like with microscopes and hands-on stuff—and this is really fun."

Creating opportunities for students to collaborate in meaningful, real-world activities through project-based learning that incorporates culturally responsive pedagogy is crucial to the development of a deep understanding of concepts. Such approaches make learning relevant for diverse student populations. When the students were asked to describe the camp in three words, they used such words as *unique, extraordinary, awesome, fun, exciting, educational,* and *adventurous*. Ideally, students should use these adjectives to describe all their educational experiences. Culturally responsive teaching practices should be embedded in all instructional approaches.

This study highlights the significance of programs offered by nonprofit organizations like the Boys & Girls Clubs and the need to establish partnerships with universities like ours to foster systematic collaboration.

We challenge higher education and PK–12 faculty to connect with local afterschool organizations to find avenues for implementing culturally responsive, project-based interdisciplinary programs to support student learning and develop students as agents of change for their communities.

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Connecting Afterschool Program Quality to Social, Emotional, and Literacy Skill Development

Neil Naftzger, Kathryn Wheeler, and Georgia Hall

Recent research syntheses (see, for example, Naftzger & Newman, 2021) have detailed how afterschool programs can support youth learning and development, including social and emotional learning, interest development, increased engagement in school, and a variety of school-related outcomes. However, one area that has received less attention is how afterschool programs that meet established quality benchmarks can support the development of social and emotional skills and of literacy skills among participating children.

Our descriptive study explored the relationship between sustained attendance in high-quality 21st Century Community Learning Centers (CCLC)–funded programs and key child outcomes. Our key hypothesis was that high-quality programming is associated with the development of social and emotional skills, which in turn may be related to academic skills such as literacy.

Study Methods

During two consecutive years, we followed 655 children from 54 21st CCLC-funded programs in two states: 31 centers in Massachusetts and 23 in Minnesota. The study included 276 Massachusetts

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Table 1.
Demographic Characteristics of Study Students

Characteristic	Massachusetts	Minnesota
Female	50%	57%
Race/ethnicity		
White	38%	34%
Hispanic	30%	24%
Black	10%	12%
Multiracial	10%	8%
Asian	12%	5%
American Indian	0%	5%
Economically disadvantaged*	52%	73%
English learner	30%	22%
Special needs	12%	12%

* Based on participation in state-administered assistance programs
Sources: Massachusetts Student Information Management System and Minnesota Automated Reporting Student System

children who were in grade 1 during the first year of the study, 2016–2017, and 379 Minnesota children in grade 4. Their demographic information is shown in Table 1.

The study included only programs with a track record of providing quality afterschool programming. Studies have shown that programs are more effective when they are high quality (e.g., Durlak et al., 2010). To measure program quality, members of the research team conducted program observations using the Assessment of Program Practices Tool (APT-O; NIOST, n.d.a) in Massachusetts and the Youth Program Quality Assessment (YPQA; Forum for Youth Investment, n.d.) in Minnesota. Both are quality assessment tools commonly used in the afterschool field. They share a set of principles of program quality that underlie both program effectiveness and the ability of programs to support social and emotional learning (Jones et al., 2017). Quality programs:

• Provide a safe and positive environment for children and adults
• Support the development of high-quality relationships between adults and children
• Provide activities that are developmentally appropriate, relevant, and engaging
• Provide opportunities for direct skill building (Jones et al., 2017)

We used the teacher version of the Survey of Academic and Youth Outcomes (SAYO; NIOST, n.d.b) to measure changes in social and emotional skills among children in the study. Originally developed by NIOST and the Massachusetts Department of Elementary and Secondary Education for use in 21st CCLC programs, the teacher version (SAYO-T) measures children's growth in the following skills:

• Engagement in learning
• Critical thinking
• Self-regulation
• Leadership
• Perseverance
• Interactions with adults
• Interactions with peers

We solicited SAYO-T surveys from one school-day teacher and one afterschool activity leader for each child. We collected the SAYO-T four times: in fall 2016, spring 2017, fall 2017, and spring 2018. In total, we received 4,245 surveys.

We also collected data on the attendance of children in the study from the 54 programs. Analysis of these data aimed to reveal the extent to which children's rate of attendance in the 21st CLCC programs affected their SAYO-T scores.

Using the subsample of 225 Massachusetts children in grade 2 during the second year of the study, we collected data on growth in literacy skills using the Oral Reading Fluency (ORF) test associated with the Dynamic Indicators of Basic Early Literacy Skills family of reading assessments (DIBELS, n.d.). The ORF test measures children's ability to read connected text accurately and fluently. We aimed to examine how literacy development may be related to program quality, attendance, and the skills measured by the SAYO-T.

Quality, Life Skills, and Literacy

We used quality ratings from the APT-O and YPQA to explore how sustained enrollment in higher-quality 21st CCLC programs was related to development of social and emotional skills in the full sample of children and to development of literacy skills in the sample of children in grade 2 in Massachusetts. APT-O and YPQA quality ratings include areas such as the nature of the activities, organization, schedule, social and emotional

environment, how staff promote engagement, and relationships.

Massachusetts centers consistently achieved high scores on the activity-level sections of the APT-O. This result is unsurprising, because these centers were chosen for the study because they met standards for "exemplary" programs. The convenience sample of Minnesota centers had a broader range of scores on the "instructional total" segment of the YPQA; these centers likely reflect average quality in 21st CCLC programs. To enable statistical comparison of centers evaluated using two different instruments, we classified all centers into quality quartiles based on their quality scores on their state's assessment tool. Centers in quartile 1 demonstrated the lowest level of quality and centers in quartile 4 demonstrated the highest.

Social and Emotional Skills

We assessed the degree to which program quality and attendance in 21st CCLC programs were related to growth, between fall 2016 and spring 2018, in the social and emotional skills assessed on the SAYO-T. We hypothesized that enrollment in higher-quality programs and higher levels of program attendance would be associated with more growth in the SAYO-T measures. Figure 1 summarizes the findings.

Attending a higher-quality program was associated to a significant degree ($p < .05$) with growth in two SAYO-T skills: *self-regulation* and *perseverance*. A moderately significant ($p < .10$) relationship was found between quality and *critical thinking*. Children grew more on these scales if they attended a center with a higher level of observed program quality. The difference between centers at the lowest level of observed program quality and those at the highest level was an average of 0.30 to 0.36 additional points of growth on the SAYO-T scale of 1 to 5.

Higher levels of attendance in 21st CCLC programming during the two years of the study were associated with significant ($p < .05$) growth on two SAYO-T skills: *self-regulation* and *engagement in learning*. The relationship between attendance and *leadership* was moderately significant ($p < .10$). On average, each 100 hours of programming attended was associated with 0.06 to 0.08 points of growth. The average hours of attendance per child across the sample was 341 hours.

Figure 1. Program Quality, Attendance, and Skill Growth

SAYO-T Skills Related to Program Quality
- Self-regulation
- Perseverance
- Critical thinking

SAYO-T Skills Related to Hours of Attendance
- Self-regulation
- Engagement in learning
- Leadership
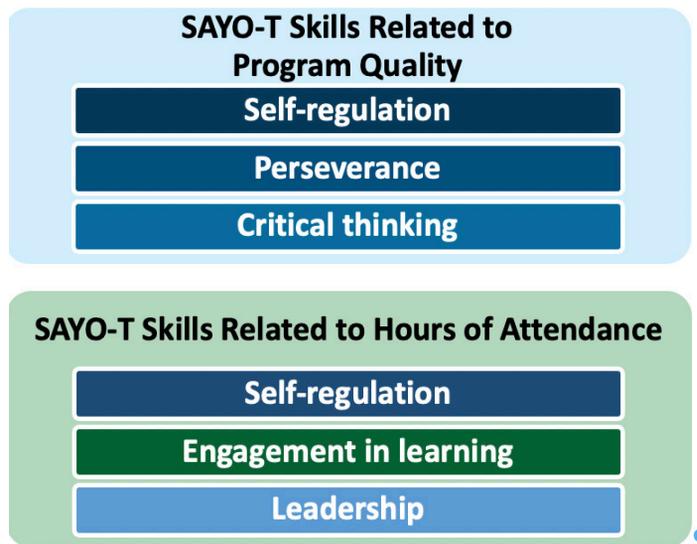
Literacy Skills

Next, we explored how growth on the SAYO-T skills associated with program quality or attendance was related to the development of literacy skills among the Massachusetts second graders. We explored:

- The connection between sustained participation in high-quality 21st CCLC programming and literacy skills in grades 1 and 2
- The role that social and emotional skills may play in literacy skill building

A key finding was that improvement in SAYO-T outcomes was related to improvement in the number of words students read on the ORF test. Students who demonstrated more growth in the SAYO-T skills linked to program attendance and quality (*self-regulation, perseverance, critical thinking, leadership,* and *engagement in learning*) also demonstrated more improvement between pretest and posttest in the number of total words read. Specifically, students who improved in five or more items on the SAYO-T subscales linked to program attendance and quality read, on average, 4.44 more words than did students who did not demonstrate this degree of SAYO-T improvement. Students in the sample read an average of 96 words on the ORF posttest. Although the degree of improvement was relatively small, this result suggests that the growth demonstrated on the SAYO-T may relate to the development of literacy skills. This finding is noteworthy because few studies have focused on the

role of afterschool program participation in supporting literacy skill development in the early elementary grades.

In addition, we found that a higher level of program quality (as measured by portions of the APT-O) was associated with a greater percentage of words read accurately. Students attending high-quality centers, on average, improved their percentage of words read accurately by 0.4 to 0.6 percentage points. The difference between a center in the bottom quality quartile and a center in the top quality quartile reflected an improvement of 1.2 to 1.8 percentage points, which on average represents one or two more words read accurately in a passage in the ORF assessment.

The average ORF pretest score was 90 percent, leaving relatively little room for improvement between the pretest and the posttest. Furthermore, the study included only programs that met quality benchmarks to begin with. In the future, a study examining programs with wider variation in program quality may demonstrate a more meaningful relationship between program quality and literacy skill growth.

Summary and Recommendations

Our results provide support for (but do not prove) the hypothesis that sustained enrollment in high-quality 21st CCLC programs may be related both to a set of social and emotional skills and to the development of literacy skills in the early elementary grades.

We found that growth in five social and emotional skills measured by the SAYO-T—*self-regulation, perseverance, critical thinking, engagement in learning,* and *leadership*—was greater for children who were enrolled in higher-quality programs, attended more regularly, or both. In turn, growth in these skills was significantly related to improvement in the number of words children could read on the ORF test.

The limitations of this study include the fact that the analyses were descriptive and correlational; they cannot establish causation. The results do not imply that particular practices cause certain skill development to happen. Furthermore, although the associations related to growth in literacy skills were positive, as expected, the magnitude of these relationships was not large. We cannot say that improvements in social and emotional skills or higher levels of program quality were associated with great advances in students' literacy skills. However, the encouraging results indicate that further study is needed.

Of the five SAYO-T skills influenced by program quality, attendance, or both, four are aligned with

behaviors that support young people as they engage in cognitively oriented learning tasks. *Self-regulation, perseverance, engagement in learning,* and *critical thinking* are intrapersonal skills necessary for managing one's own learning. The finding that these skills are related to program quality and attendance may have ramifications for future studies seeking to understand which skills may be especially supported by sustained participation in high-quality 21st CCLC programs for elementary school-aged youth. Future studies can systematically collect data on development of social and emotional skills and of early literacy skills. These areas have not been adequately explored in studies evaluating the effectiveness of 21st CCLC programs.

In light of study findings, we recommend that afterschool programs consider adopting the following practices:

- Using tools like the APT-O and YPQA to help staff adopt practices that support program quality and the development of social and emotional learning skills among program participants

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Literacy Strategies

Another part of our study examined materials provided by the Massachusetts 21st CCLC sites to examine how these programs promoted literacy development (Wheeler et al., 2022). We found three main sets of strategies:

1. Direct literacy instruction: offering children hands-on opportunities to speak or perform publicly, read independently or in a group, write, and get homework support

2. Broad literacy strategies: engaging children in activities tied to literacy, such as conducting research, analyzing what they read, learning new vocabulary, and making multidisciplinary connections

3. Contextual supports for literacy learning: fostering literacy development by supporting the adults who work with children through professional development for program staff, coordination with school personnel, and family engagement

For details, see our article in the spring 2022 issue of *Afterschool Matters* (Wheeler et al., 2022).

- Intentionally pairing practices that support social and emotional learning with those that support literacy development in the design and delivery of afterschool activities serving children in the early elementary grades

Acknowledgments

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Afterschool Matters

Call for Papers

Afterschool Matters is a peer-reviewed journal dedicated to promoting professionalism, scholarship, and consciousness in after-school education. Published by the National Institute on Out-of-School Time, *Afterschool Matters* serves practitioners who work with youth in out-of-school time (OST) programs, as well as researchers and policymakers in youth development.

We are seeking articles for future issues of the journal, beginning with Spring 2024. Scholarly or practice-based work on all aspects of OST programming for children and youth, from a variety of disciplines and academic perspectives, will be considered. We welcome submissions that explore practical ideas for working with young people in OST programs. Personal or inspirational narratives and essays are appropriate for our section "Voices from the Field."

All articles, whether scholarly or practice-based, should connect theory to practice and should be broadly applicable across the field. Articles must be relevant and accessible to both practitioners and academic researchers.

We invite you to discuss possible topics in advance with us. A broad variety of topics will be considered, including the following:

- Innovative program approaches in creative youth development, STEM, civic engagement, social and emotional development, or academic improvement
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- Key aspects of program leadership and administration
- OST system-building, such as cross-city and statewide initiatives
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- School-community partnerships that support OST programming
- Physical activity and healthy eating
- Special needs youth, immigrant and refugee youth, or other vulnerable populations in OST
- Youth-centered participatory action research projects
- Gender-focused research and policy initiatives related to OST

Submission Guidelines

- For consideration for the Spring 2024 issue, submit your article no later than November 15, 2023, to ASMsubmission@wellesley.edu.
- Submissions should not exceed 5,000 words.
- Submit your article electronically in Microsoft Word or rich text format. Use 12-point Times New Roman font, double-spaced, with one-inch margins on all sides. Leave the right-hand margin ragged (unjustified), and number pages starting with the first page of text (not the title page, which should be a separate document).
- Include a separate cover sheet with the manuscript title, authors' names and affiliations, and the lead author's phone number and e-mail address.
- The names of the authors should not appear in the text, as submissions are reviewed anonymously by peers.
- Follow the *Publication Manual of the American Psychological Association, 7th Edition* (2019), for reference style guidelines. Present important information in the text and do not use extensive footnotes.

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