



Who Participates and Why It Matters: Understanding Demographic and Academic Differences in a College Campus-Support Program for Students with Foster Care Experience, Students Experiencing Homelessness, and Independent Students

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Abstract

College students who have experienced foster care, homelessness, or are otherwise independent face barriers in postsecondary education. Campus support programs (CSPs) provide specialized services, yet not all eligible students participate. Little is known about demographic or academic differences between CSP participants and eligible nonparticipants—information critical for strengthening outreach. This study examined the student characteristics that predict CSP participation, and whether participation is associated with improved first-year academic outcomes. University administrative records identified first-time CSP-eligible freshmen who entered a public Midwestern university between Fall 2021 and Fall 2024 ($n=264$). First-year outcomes included cumulative GPA and academic standing. The key independent variable was CSP participation. Covariates included gender, race, in-state residency, first-generation status, and cohort year. Bivariate and regression analyses were conducted. About 19% of eligible students participated in the CSP. Participants were significantly more likely to identify as Black and as first-generation college students than nonparticipants. Regression analyses showed that CSP participation was significantly associated with higher first-year GPA. Regardless of participation status, Black students and out-of-state students had lower GPAs than White and in-state students. CSP participation trended toward increasing the odds of good academic standing, but this effect did not reach statistical significance. Black students had lower odds of good academic standing than White peers. These early findings support the potential role of CSPs in supporting students with intersectional marginalized identities. Low participation rates underscore the need for more targeted outreach. Future research should include more rigorous evaluations of CSPs and long-term college outcomes.

Keywords Campus support program · Postsecondary education · Foster care · Homelessness · Academic

Introduction

Recent national data reveal that substantial numbers of children and adolescents in the United States continue to experience foster care involvement and homelessness. In 2004, over 500,000 children and young adults aged 0–23 were in foster care at a given point in time (U.S. Children’s Bureau, 2025). During the 2022–2023 school year, nearly 1.4 million public school students in ungraded programs or pre-K through grade 13 (i.e., students who completed grade 12 but remained in bridge-to-higher education programs) experienced homelessness, about 9% of whom were unaccompanied minors (National Center for Homeless Education [NCHE], 2024). These figures have increased roughly

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25% since the onset of the COVID-19 pandemic in 2020 (NCHE, 2024).

Research consistently shows that those who have experienced foster care or homelessness face poorer educational outcomes than their peers. For example, *students with foster care and/or homelessness experiences* (SEFC/H; Jackson et al., 2024) are less likely to graduate from high school (Courtney et al., 2007, 2016; SchoolHouse Connection, 2025a) and are also less likely to enroll in, persist through, and graduate from college compared with peers without such experiences (Courtney et al., 2007; Geiger & Beltran, 2017; Okpych & Courtney, 2018), despite expressing high aspirations for postsecondary education (Au & Hyatt, 2017; Courtney et al., 2014).

These educational disparities among SEFC/H are important to examine for several reasons. First, educational attainment is a key predictor of long-term socioeconomic outcomes, including income, employment, and overall wellbeing. In 2022, for example, the median income of individuals with a bachelor's degree was 59% higher than that of high school graduates (National Center for Education Statistics, 2024), and earnings gains from higher education are particularly pronounced for *students with foster care experience* (SEFC; Collins et al., 2025) compared with peers in the general population (Okpych & Courtney, 2014). Moreover, an estimated 15 million new jobs will require a bachelor's degree, while nearly 600,000 living-wage jobs for high school graduates are expected to disappear (Strohl et al., 2024). Second, disparities in education can perpetuate cycles of disadvantages, limiting social mobility and increasing the likelihood of continued system involvement or housing instability among SEFC/H (Okpych & Courtney, 2014; Rosenberg & Kim, 2018).

Campus support programs (CSPs) have emerged as a key postsecondary institutional strategy, offering academic, financial, and emotional resources to promote student success in higher education. Several hundred two-year and four-year colleges across the U.S. now have a CSP (Fostering Academic Achievement Nationwide [FAAN], 2025; Okpych et al., 2020). However, despite their growing presence, limited empirical research has examined how students who participate in CSPs differ from those who are eligible but do not engage, particularly in terms of demographic characteristics and educational outcomes. Drawing on university administrative records, this study addresses this critical gap and adds to existing research (e.g., Day et al., 2025; Okpych et al., 2020) by systematically comparing both groups to deepen understanding of CSP participation and inform future program development and policy efforts.

Background

Barriers and Challenges in Higher Education for SEFC/H

Several studies have documented low rates of postsecondary enrollment and completion among SEFC and *students experiencing homelessness* (SEH; Havlik et al., 2018). For example, a recent systematic review of 17 studies found that among SEFC, college enrollment ranged from 29–64%, while postsecondary degree completion ranged from 8–12% across studies (Okpych et al., 2025). Similarly, research on SEH showed that, compared to peers with secure housing, fewer than one-third enrolled in a four-year institution and were less likely to complete any credits, which was a trend that held across racial/ethnic groups (Chapin Hall, 2019). While both SEFC and SEH share some barriers in common with other under-resourced student groups (e.g., low-income or first-generation students), SEFC and SEH face additional, distinct barriers to postsecondary success.

Research has identified multiple factors that may contribute to low postsecondary enrollment and completion among SEFC/H. For SEFC, the lack of “family privilege” (Seita, 2014, p. 8) can limit access to emotional, financial, and life-skills support (Jackson et al., 2024; Salazar et al., 2016; Seita, 2014), which likely reduces success in higher education. For SEFC who remain in foster care while attending college, the child welfare system provides support for their well-being (e.g., money for housing, emergency troubleshooting); however, in most states, these supports end abruptly upon turning 21 (Okpych, 2021). Experiences of childhood maltreatment, trauma, and separation from family have also been linked to poorer mental health outcomes (Grummitt et al., 2024), which, in turn, are associated with lower educational performance (Klugman et al., 2024). Housing instability and food insecurity are particularly prevalent among SEH and SEFC (Chassman et al., 2020; Goldrick-Rab et al., 2019; Hatch et al., 2022). Lastly, barriers common across these and other under-resourced student populations include: frequent home and school instability (Morton, 2015; Pavlakis & Pryor, 2021); enrollment in under-resourced high schools with limited academic preparation for college (Dworsky & Pérez, 2010; Frerer et al., 2013); and the need to balance work and school due to financial hardship (Jackson et al., 2024; Okpych & Courtney, 2018).

Higher Education Support for SEFC/H

Legislative Foundation

The U.S. Congress has enacted legislation to address the educational disparities faced by SEFC/H. For SEH, the McKinney-Vento Homeless Assistance Act of 1987 aimed to alleviate the effects of housing instability on education by requiring high school counselors and school district liaisons to support college readiness and access (School House Connection, 2025b). The College Cost Reduction and Access Act of 2007 further expanded access to federal financial aid for unaccompanied youth. For SEFC, the Chafee Foster Care Independence Act of 1999 established the Education and Training Voucher (ETV) Program in 2001, providing up to \$5,000 per academic year for postsecondary expenses (e.g., tuition, books) for students meeting certain eligibility criteria (Hanson et al., 2023). Additionally, the Fostering Connections to Success and Increasing Adoptions Act of 2008 established extended foster care (EFC), allowing participating states to extend foster care services (e.g., placement, monthly stipends, case management) up to age 21 for eligible students, including those enrolled in college. EFC can provide stability for SEFC pursuing higher education. Some states offer supplemental programs to cover college tuition for students remaining in EFC. For a comprehensive review of federal child welfare and education laws pertaining to SEFC, see Okpych (2021).

In addition to federal legislation, state-level policy responses have emerged, including tuition waivers for SEFC in approximately 37 states (Bustillos et al., 2022) and for SEH in several states (SchoolHouse Connection, 2025c). For example, Florida provides tuition waivers for SEFC/H at institutions within the Florida College System (Florida Statute 1009.25(1)(c)) and offers monthly stipends for housing and utilities through the Postsecondary Education Services and Support program while students are enrolled in higher education (Florida DCF, n.d.). Although the impact of tuition waivers on SEFC outcomes has not yet been widely studied, preliminary evidence suggests they may promote college enrollment (Geiger & Okpych, 2022).

Despite these legislative and policy initiatives, several challenges remain: 1) SEFC/H are often unaware of available programs; 2) narrow eligibility criteria exclude some students; 3) financial supports may be insufficient to cover the high costs of postsecondary education and living expenses; and 4) by primarily focusing on financial aid, these programs do not address challenges unique to SEFC/H, such as gaps in life skills, emotional support, and academic guidance needed to navigate college successfully (Salazar et al., 2016; Unrau et al., 2012).

Campus Support Programs

CSPs have emerged as an important intervention for SEFC/H in higher education (Geiger et al., 2018; Okpych et al., 2020). Despite sharing a common name, CSPs vary widely in practice, including the student populations they serve (e.g., exclusively SEFC or multiple student groups), program components and services, staffing, funding sources, and eligibility criteria (Geiger et al., 2018). Regarding target populations, many CSPs primarily or exclusively serve SEFC (e.g., Blakeslee et al., 2022; Collins et al., 2025; Lenz-Rashid, 2018), while others also include SEH (e.g., Cheatham et al., 2021; Huang et al., 2020; Jackson et al., 2024) or students who experience basic needs insecurity (Crutchfield et al., 2020).

Considering program components, most CSPs share core features: individualized academic coaching/advising, personal mentoring, and/or life skills-building workshops. These services are typically delivered by guidance/academic counselors, life coaches, case managers, or community mentors including peer mentors (e.g., Blakeslee et al., 2022; Collins et al., 2025; Schelbe et al., 2024). Participants consistently identify coaching or mentoring programs as important, helpful, or frequently utilized services offered by CSPs (Collins et al., 2025; Huang et al., 2019; Jackson et al., 2024; Unrau et al., 2017). For example, Kinarsky et al. (2017) found that informal meetings with CSP staff occurred more frequently than interactions with formal services.

A range of other program components offered less frequently include: 1) housing support, ranging from temporary emergency housing (Crutchfield et al., 2020) to year-round on-campus housing for SEFC (Lenz-Rashid, 2018); 2) financial support, including grants, emergency funds (Crutchfield et al., 2020), and financial aid or scholarships (e.g., Day et al., 2025; Samarah et al., 2023); 3) mental health support, ranging from referrals (Jackson et al., 2024) to on-site counseling (Lenz-Rashid, 2018) or counseling with designated off-campus professionals (Kinarsky et al., 2017); and 4) basic needs support, including food pantries (Collins et al., 2025; Schelbe et al., 2024) and assistance with campus meal plans or Supplemental Nutrition Assistance Program application (Crutchfield et al., 2020).

Additionally, considerable variation exists across institutions in staffing capacity and CSP eligibility criteria (e.g., Collins et al., 2025; Kinarsky et al., 2017). For instance, some programs operate with a single full-time staff member supported by part-time personnel or student interns (Kinarsky et al., 2017), whereas others employ several full-time professionals (Lenz-Rashid et al., 2018). Eligibility requirements also differ: some CSPs mandate documentation of foster care or homelessness experiences (Jackson et al., 2024; Unrau et al., 2017), while others permit self-identification

(Collins et al., 2025). Although comparing CSP participants with homelessness vs. foster care experience would be valuable, the existing literature is limited, making it difficult to document differences across eligibility characteristics. Overall, although CSPs consistently emphasize individualized mentoring and academic coaching, substantial variability exists in the types of services offered, staffing capacity, and eligibility criteria across programs.

Research on CSP Participation and Outcomes

Over the past 20 years, several studies have examined CSPs. These studies vary in terms of data sources (e.g., self-report vs. administrative records), number of CSPs included (e.g., a single CSP at one college vs. multiple CSPs across institutions), and outcomes assessed (e.g., GPA, academic standing, retention, graduation). As discussed below, many studies report outcomes of CSP participants, but very few have employed rigorous evaluation methods to estimate the impact of CSPs. We provide an overview of findings regarding participant characteristics, academic outcomes, and attempts to evaluate CSP impact.

Regarding demographic characteristics, most studies report that CSP participants are predominantly female and students of color (e.g., Collins et al., 2025; Dworsky & Pérez, 2010; Huang et al., 2019; Lenz-Rashid, 2018), though a few exceptions exist. For example, one study found that survey participants were mostly male (Kinarsky et al., 2017), while another found primarily White participants (Blakeslee et al., 2022). Collins et al. (2025) reported that females predominated in a four-year CSP, whereas males slightly outnumbered females in a two-year CSP.

The educational outcomes examined in CSP studies also varied widely. The most frequently measured outcome was average GPA (Blakeslee et al., 2022; Collins et al., 2025; Huang et al., 2019) and retention/persistence rates or graduation rates (e.g., Blakeslee et al., 2022; Lenz-Rashid et al., 2018; Okpych et al., 2020; Unrau et al., 2017), followed by indicators of academic standing (e.g., course credit completion) or remedial course enrollment (e.g., Collins et al., 2025; Day et al., 2025; Dworsky & Pérez, 2010). Additional detail about these studies are provided in the subsequent paragraphs.

Several studies have compared academic outcomes of CSP participants with a comparison group (e.g., general student population, Pell grant recipients, CSP eligible non-participants), often without statistically adjusting for other differences between the groups that could have influenced outcomes (e.g., educational aspirations, academic preparedness, non-school responsibilities like working or parenting).

Consequently, these results should be interpreted cautiously and not taken as evidence of a CSP's causal impact. Findings on the relationship between CSP participation and GPA have been mixed. For example, Collins et al. (2025) observed higher GPAs among CSP participants at a four-year university compared to other eligible SEFC, but they found no significant GPA differences between CSP participants and eligible nonparticipants at a technical college. Blakeslee et al. (2022)'s study on a CSP serving SEFC with mental health challenges found a delayed effect of participation on GPA, emerging only at a six-month follow-up. Similarly, Huang et al. (2019) reported that the time it took SEFC/H to connect with a CSP in a public university was negatively associated with GPA¹.

Several studies have also compared college retention, persistence, and/or graduation rates between CSP participants and comparison groups. Unrau et al. (2017) examined six-year graduation rates for SEFC in a CSP relative to the university's general population of first-time students and found that SEFC had a lower graduation rate than their peers (30% vs. 54%). Lenz-Rashid (2018) compared sophomore retention, overall retention, and six-year graduation rates for SEFC participating in a university CSP ($n = 194$) against three populations: the university's general student population, the university's Pell Grant recipients, and a national sample of public university students. The study found that CSP participants had higher retention and six-year graduation rates than these comparison groups.

As stated above, a major limitation of studies that simply compare outcomes between CSP participants and another student group (e.g., general student population, Pell grant recipients) is the potential for selection bias. The two groups may differ in important ways that influence their college outcomes. Depending on the nature of the selection bias, findings could give a false impression that a CSP is more impactful than it truly is, or that a CSP is not impactful when, in reality, it is. A small subset of CSP studies have attempted to address selection bias using statistical methods.

Day et al. (2025) compared the retention of SEFC who participated in a CSP at a four-year university ($n = 156$) with SEFC nonparticipants ($n = 55$) and TRIO-eligible students without foster care backgrounds ($n = 120$) enrolled between Fall 2012 and Winter 2016. They used propensity score weighting to address potential selection bias and found that the dropout rate was significantly lower for CSP participants than for nonparticipants, but still higher than for

¹ Huang et al. (2019) also found that the number of semesters SEFC/H remained engaged with the CSP was positively associated with GPA. However, these findings should be interpreted cautiously, as endogeneity (i.e., students with higher GPAs may have been more likely to remain engaged) and selection bias could have influenced the relationship between the duration of CSP engagement and academic performance.

TRIO-eligible students. However, there are several limitations in how the propensity score analysis was conducted, so the findings should be interpreted cautiously. For example, only four variables were used to balance the groups, the student groups were quite imbalanced before propensity adjustment (e.g., the CSP group had a much higher percentage of upper-class students than the SEFC comparison group), and no information was provided about whether the balancing was successful.

Okpych et al. (2020) analyzed data from the California Youth Transitions to Adulthood Study (CaYOUTH), a longitudinal study of transition-aged youth in California foster care. The sample was restricted to SEFC who had enrolled in college ($n=401$). Students were enrolled in over 100 colleges in California and beyond, some with CSPs and others without. Regression analyses examined whether CSP participation (based on self-report in the CaYOUTH survey) was associated with persisting through the first year in college (measured using data from the National Student Clearinghouse). The analyses controlled for over two dozen variables to address selection bias, including demographic characteristics, academic background, foster care history, social support, behavioral health, and characteristics of the college attended by SEFC. After accounting for these factors, they found that the odds of persisting through the first year for CSP participants was 2.1 times the odds of persistence for SEFC who did not participate. Some limitations of this study include that CSP participation was self-reported, leaving room for recall or reporting errors, and there may still be unmeasured confounders not included in the regression model.

Briefly, one mixed-methods study (Schelbe et al., 2024) examining post-graduation employment outcomes among CSP participants who graduated from a four-year college. The study compared outcomes of 54 CSP graduates with those of the general population without foster care experience. They found that employment rates were comparable between groups, but pay gaps persisted.

Gaps in Practice and Research

The lack of large-scale, rigorous program evaluations, and standardized evaluation methods has been identified as a major gap in the literature (Collins et al., 2025; Dworsky & Pérez, 2010; Schelbe et al., 2019). Studies with representative samples and sound statistical methods are needed to address potential selection bias when estimating the effects of CSPs. Moreover, most existing research relies on survey data alone (e.g., Blakeslee et al., 2022; Jackson et al., 2024; Kinarsky et al., 2017), some on administrative data only (Lenz-Rashid, 2018), and others on interviews or qualitative

methods exclusively (Samarah et al., 2023; Skobba et al., 2018). Fewer studies integrate multiple data sources, such as administrative and survey data (Okpych et al., 2020), administrative data and interviews (Collins et al., 2025), or a combination of administrative data, surveys, and interviews (Huang et al., 2019, 2020). Similarly, most evaluations report only descriptive statistics, with few employing methods designed to address selection bias when estimating the role of CSPs in student outcomes.

This variation in data and methods may partly reflect challenges identified by Schelbe et al. (2019), finding that 53% of CSP staff reported program evaluation as a challenge, and 63% had not conducted a formal evaluation. Among those who did, 62% reported that evaluations were internal only. Prior research has highlighted this gap (e.g., Dworsky & Pérez, 2010) and called for more rigorous CSP evaluations (Huang et al., 2019). Of particular interest are differences between students who engage with a CSP and those who are eligible but do not participate (Jackson et al., 2024; Samarah et al., 2023; Unrau et al., 2017). Lastly, few studies explicitly distinguish between first-time freshmen and continuing students (e.g., Lenz-Rashid et al., 2018; Unrau et al., 2017), despite evidence suggesting that the first year of college is a critical period during which academic adjustment, credit accumulation, and early persistence shape long-term educational outcomes (van Rooj et al., 2018).

The Current Study

Building on prior research, the current study uses administrative records from a public Midwestern university to address gaps in understanding CSP participation and academic outcomes among eligible students. The CSP, founded in 2007, serves students who have experienced foster care (inclusive of kinship care), homelessness, or otherwise independent (students with similar backgrounds and qualify as an independent student for financial aid dependency status, such as a student in a legal guardianship). Eligibility and recruitment are determined based on several indicators from the FAFSA and admissions application. This CSP is staffed by a full-time director, a part-time staff member, and several graduate student interns. Program services include academic and personal advising (e.g., coaching, mentoring), life skills development, provision of basic needs resources, and student leadership programs.

This study examines demographic characteristics and key educational markers, including cumulative GPA and academic standing, to compare first-time freshmen who participate in the CSP with those who are eligible but do not participate. By comparing these two groups, the study provides insight into who participates in CSPs, how

participation relates to demographic characteristics and first-year academic success, and potential disparities in participation. Findings can inform outreach strategies, program improvement, institutional policy, and broader efforts to support the postsecondary success of SEFC/H. This study addresses the following research questions:

1. What demographic characteristics are associated with CSP participation?
2. Is CSP participation related to first-year academic outcomes (cumulative GPA and academic standing)?
3. What other student characteristics are associated with first-year academic outcomes?

Methods

Sample and Data

We utilized university administrative records provided by the Registrar's Office for academic years (AY) 2021 through 2024 to identify CSP-eligible first-time freshmen enrolled at a public Midwestern university². Of the 273 first-time students identified as eligible by the admission office, nine (3% of the sample) were missing information on first-year GPA and academic standing and were excluded from the analyses. Thus, our final analytic sample includes 264 first-time CSP-eligible students who enrolled in at least one primary term (Fall or Spring) in AY 21 to AY 24.

Measures

Independent Variable—CSP Participation

The primary independent variable measured whether a student participated in the CSP in their first year, which was entered by CSP staff in administrative records (0=nonparticipant; 1=participant).

Dependent Variables—First Year Academic Outcomes

Academic outcomes were captured by two measures: 1) first-year cumulative GPA (continuous) and 2) academic

standing (binary). Cumulative GPA was measured on a 0–4.0 scale at the end of students' freshman year (i.e., the GPA recorded for the spring semester of their entry year). Most recent academic standing, obtained directly from administrative records, originally included multiple categories (e.g., good, probation, dismissed, recess) and was recoded into a binary measure for analysis (1=good academic standing, 0=not good academic standing). Per the institution, a student is in good academic standing if the student's cumulative GPA is at least 2.00.

Covariates—Demographic Characteristics

Demographic characteristics included the following measures: sex (1=female, 0=male); race (1=White, 2=Black or African American, 3=another race or not specified); residency status (1=out-of-state, 0=in-state); and first-generation college student status (1=first generation, 0=not first generation). Administrative records initially captured students' race/ethnicity as an eight-category variable. Due to small sample sizes, race/ethnicity was recoded into a three-category variable by combining the categories of Asian, Hispanic/Latino, American Indian/Alaska Native, two or more races, international, and not specified. Lastly, cohort year measured the academic year in which the student first entered the university (1=AY 2021–2022; 2=AY 2022–2023; 3=AY 2023–2024; 4=AY 2024–2025). This set of variables controlled for cohort effects (i.e., differences in the CSP or college environment that could have affected the outcomes).

Analysis

We first present demographic and academic characteristics for the full sample and stratified by CSP participation status (participants vs. nonparticipants). To examine differences by participation in bivariate analyses, we used chi-square tests and t-tests to compare sample characteristics between the CSP participation groups. We used linear regression and binary logistic regression to examine whether CSP participation was associated with cumulative GPA and academic standing, respectively, after adjusting for other covariates.

Results

Sample Description

Table 1 shows the demographic and academic characteristics of the entire sample (the first column). Nearly two-thirds were female. With respect to race/ethnicity, 38% were

² We did not include SEFC who had been previously enrolled at another college. In addition to the 273 students eligible for the study, there were 71 SEFC who had transferred from another college or university. We did not include them in the present analysis because transfer students had prior experience in college that could have clouded the effect of the CSP on academic outcomes. In the future, when data from more cohorts are available, we plan on investigating the role that CSPs have on promoting academic success among SEFC transfer students.

Table 1 Descriptive statistics for the full sample ($n=264$) and by participation status

	Full sample ($n=264$)		Nonparticipants ($n=213$)		Participants ($n=51$)		p
	$n /$ mean	% / SE	$n /$ mean	% / SE	$n /$ mean	% / SE	
Outcomes							
First-year cumulative GPA (0.0–4.0)	3.00	0.94	2.97	0.67	3.12	0.11	NS
Academic standing (most recent semester)							
Good	229	86.7	182	85.5	47	92.2	NS
Not good	35	13.3	31	14.5	4	7.8	
Covariates							
Gender							NS
Female	175	66.3	137	64.3	38	74.5	
Male	89	33.7	76	35.7	11	25.5	
Race							***
White	98	37.1	77	36.8	21	42.0	
Black	61	23.1	40	19.1	21	42.0	
Other race	100	37.9	92	44.0	8	16.0	
Residence							NS
In-state	227	86.0	185	86.9	42	82.4	
Out-of-state	37	14.0	28	13.2	9	17.6	
First generation							**
Yes	107	40.5	76	35.7	31	60.8	
No	157	59.5	137	64.3	20	39.2	
Cohort year							NS
AY 2021–2022	64	24.2	49	23.0	15	29.4	
AY 2022–2023	68	25.8	60	28.2	8	15.7	
AY 2023–2024	58	22.0	46	21.6	12	23.5	
AY 2024–2025	74	28.0	58	27.2	16	31.4	

** $p < .01$; *** $p < .001$; NS: Not significant.

identified in admissions records as other race/ethnicity, followed by White (37.1%) and Black (23.1%). In-state students constituted the majority of the sample (86%). About 40% of CSP-eligible students were first-generation college students. The sample was relatively evenly distributed across cohort years, with 3% fewer students in AY 2023–2024 and 3% more in AY 2024–2025. Looking at academic outcomes, the cumulative GPA at the end of the first year was 3.00 on average, and about 87% were in good academic standing at the time of the most recent status review.

Bivariate Analyses

The second and third columns of Table 1 present the sample characteristics and outcomes stratified by CSP-participation status. The bivariate analyses found no statistically significant ($p < .05$) differences in academic outcomes between CSP participants and nonparticipants. Significant differences were found by race/ethnicity and first-generation status. Students who participated in a CSP were more likely to be Black (42.0% vs. 19.1%; $p < .001$) and less likely to be identified as another race (16.0% vs. 44.0%; $p < .001$). Additionally, compared to nonparticipants, CSP participants

were more likely to be first-generation college students (60.8% vs. 35.7%; $p < .01$). No significant differences were observed by gender, residency status, or cohort year.

Regression Analyses

Table 2 shows the results from two regression models: 1) a linear regression model estimating first-year cumulative GPA (Model 1) and 2) a binary logistic regression model estimating most recent academic standing (Model 2). CSP participation is the primary independent variable in both models. Results from Model 1 are reported as differences in GPA points and results from Model 2 are reported as odds ratios (ORs) of being in good academic standing.

Findings show that participation in a CSP was significantly associated with higher first-year cumulative GPA. Compared to nonparticipants, students who participated in the CSP were expected to have a GPA that was 0.35 grade points higher ($p < .05$) after adjusting for other covariates. CSP participation trended toward increasing the odds of being in good academic standing, though it did not reach statistical significance ($OR = 2.63$, $p = .106$).

Table 2 Estimates of academic outcomes from regression models (n=264)

	Model 1: Cumulative GPA (n=264)			Model 2: Academic standing (n=264)		
	<i>B</i>	SE/ CI	<i>p</i>	<i>OR</i>	SE/ CI	<i>p</i>
Participated in CSP (ref: no)	0.34	0.15 [0.04, 0.64]	*	2.63	1.57 [0.81, 8.47]	^
Yes						
Gender (ref: male)						
Female	0.10	0.12 [-0.14, 0.35]		1.40	0.57 [0.63, 3.12]	
Race (ref: white)						
Black	-0.34	0.15 [-0.65, -0.04]	*	0.37	0.18 [0.14, 0.97]	*
Other race/not specified	0.27	0.14 [0.01, 0.54]	^	1.22	0.59 [0.47, 3.14]	
Cohort year (ref: AY 2021–2022)						
AY 2022–2023	0.13	0.17 [-0.20, 0.45]		1.02	0.53 [0.37, 2.83]	
AY 2023–2024	0.11	0.17 [-0.23, 0.45]		0.91	0.50 [0.31, 2.65]	
AY 2024–2025	0.08	0.16 [-0.24, 0.10]		1.94	1.14 [0.61, 6.13]	
First generation (ref: no)	-0.11	0.12 [-0.35, 0.13]		1.14	0.46 [0.52, 2.50]	
Out-of-state residence (ref: in-state)	-0.47	0.17 [-0.80, -0.13]	**	0.47	0.23 [0.18, 1.22]	

^ $p < .10$; * $p < .05$; ** $p < .01$.

Regression analyses also identified several covariates that were significantly associated with academic outcomes. Compared to White students, students identified as Black had significantly lower first-year cumulative GPA ($b = -0.34$; $p < .05$) and significantly lower odds of being in good academic standing ($OR = 0.37$; $p < .05$). We find that out-of-state residency was also negatively associated with academic performance. Compared to in-state students, out-of-state students had lower first-year GPA ($b = -0.44$; $p < .01$).

Limitations

This study provides an early look at outcomes for SEFC/H in the CSP, and several limitations should be noted when interpreting the findings. First, the sample was drawn from a single CSP at one four-year university utilizing administrative data. SEFC/H in this sample had high retention (about 95%), high average first-year GPA, and the majority were in good academic standing. Although all available data were used, the sample was relatively small, and the analyses may have been statistically underpowered to detect real but small differences in outcomes. This is especially true given the number of covariates included in the model and the high prevalence of good academic standing in both groups, leaving little room for variation. Relatedly, small subgroup sample sizes limited our ability to disaggregate analyses by race

and ethnicity. To ensure adequate statistical power and protect participant confidentiality, several racial/ethnic groups were combined for analysis (e.g., $n = 2$ for American Indian/Alaska Native). As a result, the study was unable to examine potentially meaningful differences across specific racial and ethnic groups, highlighting an important area for future research. Future research with larger and more diverse samples should examine these groups separately whenever feasible. Additionally, because program-level data could not be linked to the administrative dataset, we could not analyze some student demographics, such as foster care history or housing status. Second, findings may not generalize to institutions with different student populations, resources, or outcomes. SEFC/H at this university may be more academically prepared than the larger population of SEFC/H.

Third, statistically significant associations should be interpreted cautiously as early findings due to the limited number of available controls. Unmeasured differences between CSP participants and nonparticipants may be associated with academic outcomes. Including additional controls and employing more advanced statistical analyses would strengthen the rigor of future studies. Fourth, the study was limited by the number of years of available administrative data, constraining analyses to short-term academic outcomes. Additional years of data are needed to examine longer-term outcomes. Finally, the CSP and non-CSP

groups were not fully comparable regarding eligibility. CSP participants included students with foster care backgrounds, homelessness experiences, kinship care involvement, or independent status, whereas the comparison group included only students with foster care backgrounds. Future studies should aim to include comparison groups that more comprehensively capture all students meeting CSP eligibility criteria.

Discussion

Building on prior research (e.g., Day et al., 2025; Okpych, 2020), the main purpose of this study was to examine whether CSP participation predicted improved academic outcomes among SEFC/H. We also identified student characteristics associated with both CSP participation and academic outcomes. Drawing on administrative data from a public Midwestern university, we found that CSP participants were significantly more likely to identify as Black (42.0%) and as first-generation college students (60.8%) than nonparticipants. Regression analyses showed that CSP participation was significantly associated with higher cumulative GPA after accounting for several covariates. Although CSP participation trended toward increased odds of being in good academic standing, this relationship did not reach statistical significance. Black students and out-of-state students had lower GPAs than White and in-state students, respectively. Black students also had significantly lower odds of being in good academic standing compared to White peers. Taken together, these findings highlight both the potential academic benefits associated with CSP participation and the ongoing need to address racial disparities in academic outcomes. Below we situate these results within the broader literature and discuss their implications for CSP participation and outreach.

First, regarding participation rates, 19.3% of eligible students participated in the CSP, which is somewhat below the 25%–65% range reported by Collins et al. (2025). Prior research suggests several barriers that may contribute to these lower rates, including stigma associated with foster care and/or homelessness experiences (Cheatham et al., 2021; Dworsky & Pérez, 2010; Kinarsky et al., 2017), full-time employment while living off-campus (Skobba et al., 2018), and perceptions that CSP services are inadequate or not helpful (Crutchfield et al., 2019). Additionally, students may be unaware of available CSPs due to inadequate outreach efforts (Courtney et al., 2016). These findings highlight the need for further investigation into the participation gap, including examining differences between participants and nonparticipants to better tailor engagement strategies. This aligns with existing calls for more targeted outreach

and programming to reach underserved eligible students (e.g., Collins et al., 2025; Dworsky & Pérez, 2010; Geiger et al., 2018; Kinarsky et al., 2017).

Second, in our bivariate analyses, academic outcomes did not differ significantly by participation status. However, CSP participants were significantly more likely to identify as Black (42.0% vs. 19.1%). This pattern aligns with broader higher education literature suggesting that Black college students report higher levels of on-campus engagement than White students (Greene et al., 2008; Harris et al., 2017). CSP studies have documented similar trends, with Black students representing a disproportionately larger share of participants (e.g., Collins et al., 2025; Dworsky & Pérez, 2010; Lenz-Rashid, 2018). The intersectional identities of Black SEFC/H, who may experience additional structural inequities and discrimination, may contribute to compounded unmet needs and academic challenges (Stevens et al., 2018; Whitman & Lopez, 2025). CSP outreach efforts may therefore resonate more strongly with Black students, or program staff may be perceived as safe and supportive—factors previously identified as vital for engagement (Cheatham et al., 2021). We also found that students identified as another race (16.0% vs. 44.0%) were significantly less likely to participate, suggesting that eligible students of color who are not Black may be underserved. Although small sample sizes necessitated the use of a combined “other” race category, these disparities underscore the need for future research to disaggregate racial groups and develop more inclusive recruitment and engagement strategies.

Additional bivariate analyses showed that CSP participants were significantly more likely to identify as first-generation college students (60.8% vs. 35.7%). This is an encouraging finding, suggesting that CSPs are reaching students who are the first in their families to attend college. General research on first-generation college students has consistently documented lower academic performance and retention rates compared to continuing-generation peers (Chen, 2005; Weisen et al., 2024), often attributed to academic challenges, family and personal obligations, and financial instability (Costello et al., 2018; Kim et al., 2021). These challenges may be further compounded for first-generation SEFC/H, who often lack consistent familial support (Seita, 2014), potentially contributing to their greater likelihood of seeking support through CSPs. Given the relatively high proportion of first-generation freshmen among CSP participants, programs should evaluate and tailor services to better meet the needs of this subpopulation, particularly during the critical transition into the first year of college (Kezar et al., 2023).

Third, this study provides evidence that participation in a campus support program is associated with an improved early academic outcome. Although bivariate analyses did

not reveal statistically significant differences in GPA, participants and nonparticipants differed in key characteristics associated with academic outcomes. After adjusting for these characteristics (i.e., comparing students with similar characteristics), CSP participation was significantly predictive of GPA and was associated with a nonsignificant increase in the odds of good academic standing. Although the range of covariates available for this analysis was limited, these findings highlight the importance of controlling for known confounders. This is particularly important given that many CSP studies compare outcomes between participants and other student groups without adjusting for confounders, which may bias findings. In some cases, such bias may underestimate the impact of CSP (as in the current study), whereas in others, it may overestimate program effects.

In the current study, we found that CSP participants had GPAs that were about one-third of a point higher than those of nonparticipants. As noted in the Literature Review, the evidence base on the impact of CSPs remains limited but is growing. Most studies do not employ rigorous designs or statistical approaches to address potential bias, and a wide range of outcomes has been examined, making it difficult to draw sound conclusions about program effectiveness. Within these constraints, studies have found mixed results. Consistent with the current study, some studies have reported higher GPAs among SEFC/H who engage with CSPs in a timely and sustained manner (Blakeslee et al., 2022; Collins et al., 2025; Huang et al., 2019). Our analysis also revealed that Black students and out-of-state students had lower GPAs than their White and in-state peers. This finding aligns with broader research on general freshmen and sophomore college populations, which has documented lower GPAs among Black students relative to their peers (Fischer, 2007; Keels, 2013). However, prior CSPs studies have rarely disaggregated GPA outcomes by race/ethnicity or residency status. This gap in the literature highlights the need for further investigation into the unique challenges and unmet needs faced by these subpopulations of SEFC/H.

Lastly, our analysis showed that CSP participation trended with increased odds of good academic standing, although our study may have been underpowered to find this to be statistically significant. This finding remains substantively important, as academic probation has negative effects on college retention and graduation (Bowman & Fenton-Miller, 2025; Bowman & Jang, 2022), and CSPs may play a protective role in reducing the likelihood of probation. These results align with broader research on the general student population, which has identified positive associations between participation in institutional support programs, such as TRIO and Upward Bound, and improved academic outcomes among nontraditional students (Bennett

et al., 2021; U.S. Department of Education, 2021). Overall, our findings suggest that CSP engagement may serve as a protective factor against early academic probation.

Implications for Practice, Policy and Research

Several implications for practice, policy, and research emerge from this study's findings. While all SEFC/H have experienced some forms of marginalization, our results show that the CSP examined in this study may disproportionately serve first-time freshmen who identify as Black and/or are first-generation college students. CSPs may therefore be particularly effective in reaching students with these intersectional identities and potentially higher levels of need. At the same time, our analyses highlight a critical service gap for other marginalized groups, including non-Black students of color and out-of-state students. To address this gap, CSPs should continue to monitor disparities in service utilization and implement tailored outreach strategies for underserved subpopulations of eligible students (Miller et al., 2017).

The findings also suggest that CSPs may function as a protective factor for short-term academic outcomes (i.e., GPA) among first-time freshmen, which are critical for long-term academic success. Program staff should prioritize early and sustained recruitment efforts, engaging students after admission (prior to enrollment) and continuing outreach throughout the first year. CSPs may also benefit from involving current participants and peer supporters in outreach activities (e.g., campus tours, tabling, presentations) to help reduce stigma and share lived experiences. Research has found that not wanting to be labeled or made visible as a "foster youth" is a reason some students do not participate in CSPs (Cheatham et al., 2021), but several studies report that being in community with peers who know what it's like to be in foster care is one of the biggest draws of participating in a CSP (e.g., Cheatham et al., 2021; Jackson et al., 2024; Unrau et al., 2017). Additionally, programs can leverage existing first-year initiatives (e.g., welcome week, first-year seminar courses) as opportunities to increase awareness and encourage participation. Expanding outreach to child welfare agencies and other youth-serving organizations within the state may further enhance program visibility and engagement.

At the policy level, states and postsecondary institutions should continue to develop, fund, and support CSPs (e.g., Collins et al., 2025; Huang et al., 2019; Lenz-Rashid, 2018), as they serve as critical interventions for often overlooked student populations facing considerable barriers to college success. Although some CSPs help address financial gaps for SEFC/H, additional federal, state, and/or institutional financial aid, particularly for older students and those with

histories of homelessness, is needed to offset the rising costs of postsecondary education and daily living. Institutions should also ensure that CSPs are adequately resourced (e.g., staffing, program space) to operate effectively and meet student needs (Author, Under Review).

Regarding implications for future research, the rigorous evaluation of CSPs remains a persistent challenge (Schelbe et al., 2019), consistent with prior calls for more standardized and large-scale evaluations (e.g., Collins et al., 2025; Dworsky & Pérez, 2010; Okpych et al., 2020). One approach, as demonstrated in the current study, is to expand data sharing partnerships between CSPs and researchers (Huang et al., 2019). Additionally, college systems with centralized data infrastructures could be leveraged to identify SEFC/H and track CSP participation, enabling more robust assessments of program impact (e.g., California Community College's Management Information System). Future research could also collect data across multiple CSP to compare program components and outcomes, thereby strengthening the evidence base and informing best practices (Geiger et al., 2018; Schelbe et al., 2019). Additionally, future research should examine student characteristics to address remaining questions about disparities in CSP participation. For example, little is known about participants' service needs (e.g., mental health) and related help-seeking behavior (Huang et al., 2019; Lenz-Rashid et al., 2018).

Of greatest need are methodologically rigorous studies designed to accurately estimate the impact of CSPs on college outcomes. When experimental designs are not feasible, researchers may use quasi-experimental methods such as instrumental variables, difference-in-difference analyses, and propensity score analyses. Furthermore, longitudinal studies are needed to examine whether long-term academic outcomes (e.g., graduation and post-college employment) are associated with CSP participation. More research on CSPs is also needed in two-year colleges, as these institutions enroll the largest proportion of SEFC (Havlicek et al., 2022; Okpych, 2021; Okpych et al., 2022).

Lastly, future studies should continue to examine student characteristics associated with CSP participation to guide advertising, outreach, and recruitment strategies. Additional research is needed to better understand the participation gap. Qualitative studies may provide insight into differences in participation by race/ethnicity, reasons why SEFC/H choose to engage or not engage in CSPs, barriers to engagement, and recommendations for recruitment. Employing mixed-methods approaches (e.g., integrating administrative data and interviews) can further elevate student voice and inform institutional practices.

Conclusion

This study contributes to the small but growing body of research examining the link between CSP participation and academic outcomes among SEFC/H. With the study limitations in mind, the results suggest that students who participated in the CSP fared better at the end of their first year in college than nonparticipants. This is particularly important, as the first year represents a critical period during which many SEFC/H drop out or stop out of college. Findings also revealed a relatively low participation rate, suggesting the need for more targeted outreach and service delivery. Additionally, disparities by race and first-generation status in first-year outcomes highlight the continued need to support students navigating multiple structural disadvantages.

Author Contribution K.V., K.P., and N.O. conceived the study. K.V. and K.P. secured access to the administrative database and managed the data extraction process. Data cleaning and statistical analyses were conducted by H.B. and K.P. J.T. performed the literature search and drafted the literature review section. All authors participated in the drafting and revision of the manuscript.

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Data Availability The data that support the findings of this study are held by the administrative registry of a public university in the mid-west. Restrictions apply to the availability of these data, which were used under license for the current study. Data are not publicly available due to institutional privacy policies.

Declarations

Competing Interests The authors declare no competing interests.

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