



THE UNIVERSITY OF CHICAGO

INCLUSIVE ECONOMY LAB

Urban Labs

Science in Service of
Cities.



July 13, 2023

How Academic Match, Social Fit, and Affordability Impact Enrollment and Persistence

College Changes Everything Conference 2023

Study Background

Three primary factors interact as students decide if and where to go to college

Academic Match

How the academic credentials of a student align with the selectivity of the college or university

Social Fit

The environmental aspects and additional supports that a student is looking for in a postsecondary institution based on personal preferences and identity

Affordability

The net cost of attending a postsecondary institution, incorporating the difference between a student's financial resources (including financial aid) and the full cost of attendance



Existing research suggests that all three factors play an important role in student success

Academic Match

- Attending the most selective institutions possible based on a student's academic record is associated with higher college completion rates
- Selective institutions tend to have better resources and can provide more support

Social Fit

- A sense of belonging is important for students' well-being and persistence, particularly for underrepresented students

Affordability

- Families face rising college costs as they pay for tuition, books, and living expenses
- More selective institutions may require students to take on more debt



Given substantial change in the higher education landscape, this paper provides an updated look at how academic match, social fit, and affordability influence:



College application



College enrollment



College persistence



Methodology

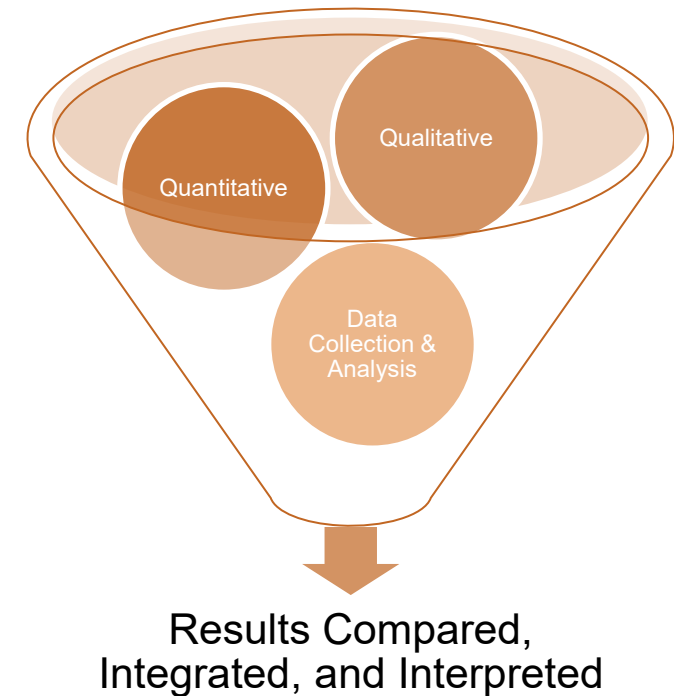
We chose a mixed method approach drawing on both quantitative and qualitative data

Quantitative approach:

- Examined the college application, enrollment and persistence of the Chicago Public Schools Class of 2018
- Application efforts tracked through the Senior Exit Questionnaire and Naviance
- Financial aid data tracked through ISAC, IPEDS, and census data
- Enrollment and persistence tracked through National Student Clearinghouse data

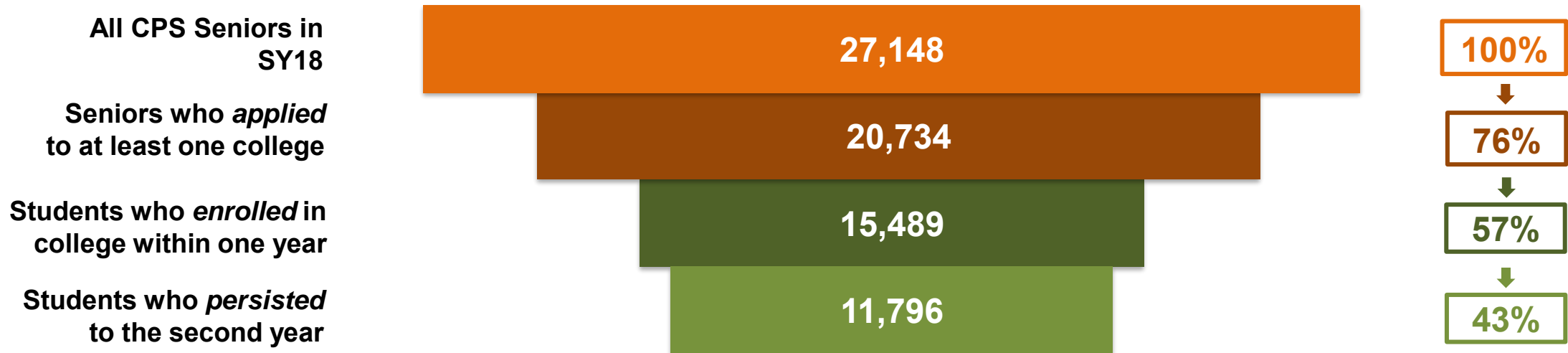
Qualitative approach:

- Conducted 53 interviews with CPS alumni who undermatched and enrolled in City Colleges of Chicago (CCC)
- Prioritized recent graduates, students who chose CCC as their first-choice college, students from the South or West side, full-time students, and students in the somewhat selective/selective band



Our study tracks the class of 2018 through their first two years of college

College access pipeline for Class of 2018



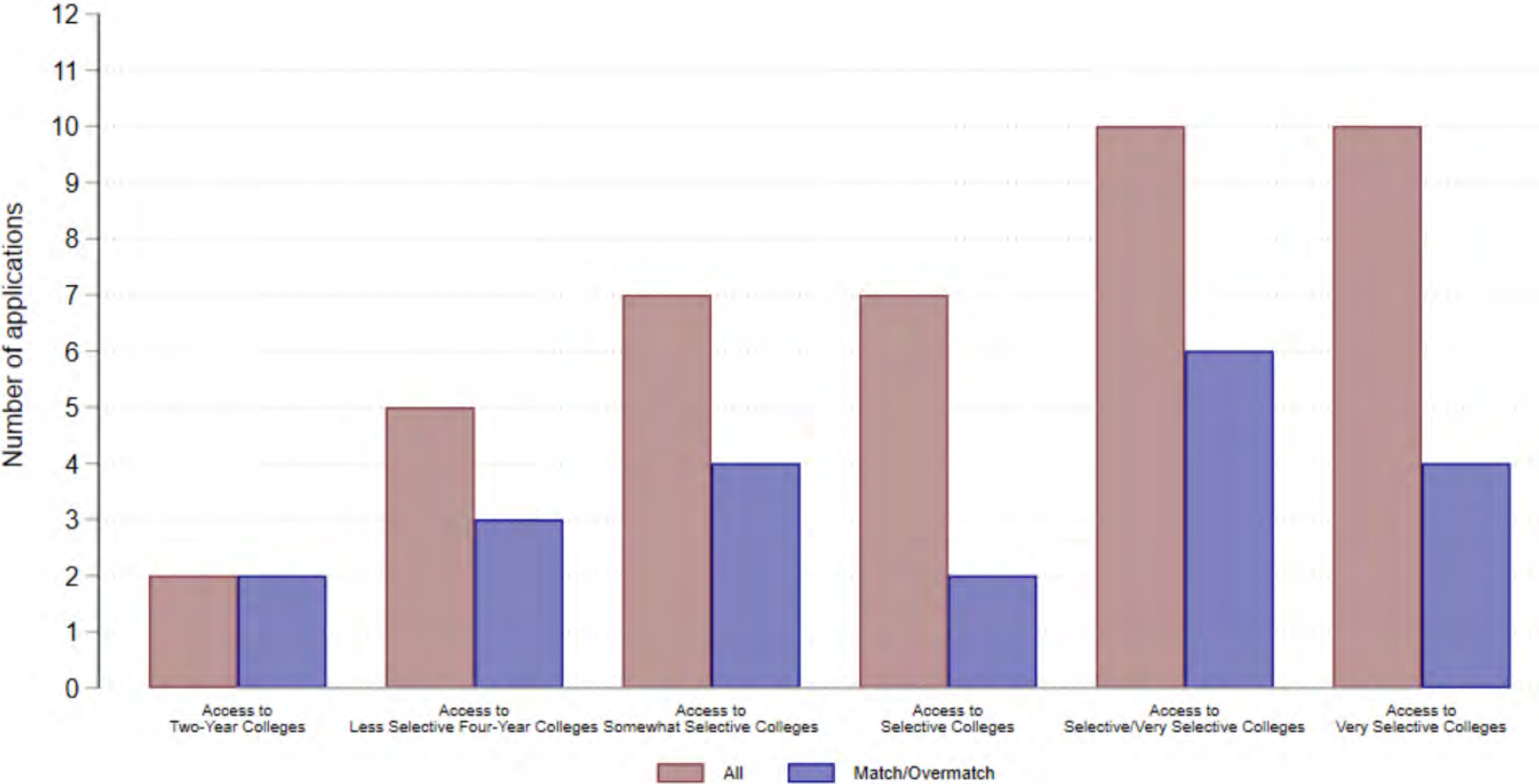
Source: 2018 SEQ file, 2018 Naviance College Application file, and 2020 NSC file

Note: Students who enrolled in college within one year include those who enroll in any terms between Summer 18 and Spring 19. Students who persisted to the second year include those who directly enroll within one year and are still enrolled at any point during the following academic year. We are using NSC 2020 which tracks enrollment up to Fall 2020.

Key Findings in College Application

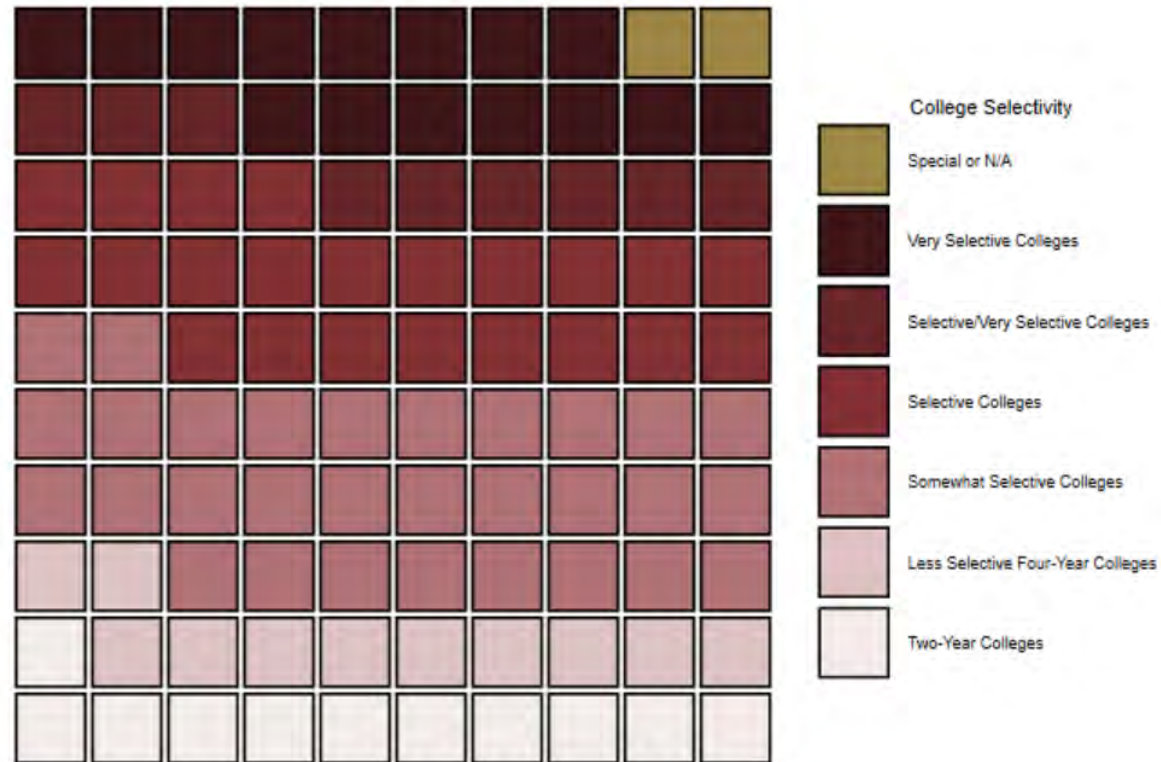
The average number of applications vary by student access level. The vast majority of students applied to at least one school that was an academic match.

Average number of all applications and match/overmatch applications by student access level (n=8,922)



Applications were submitted to schools of varying selectivity levels. The plurality of applications were submitted to somewhat selective colleges.

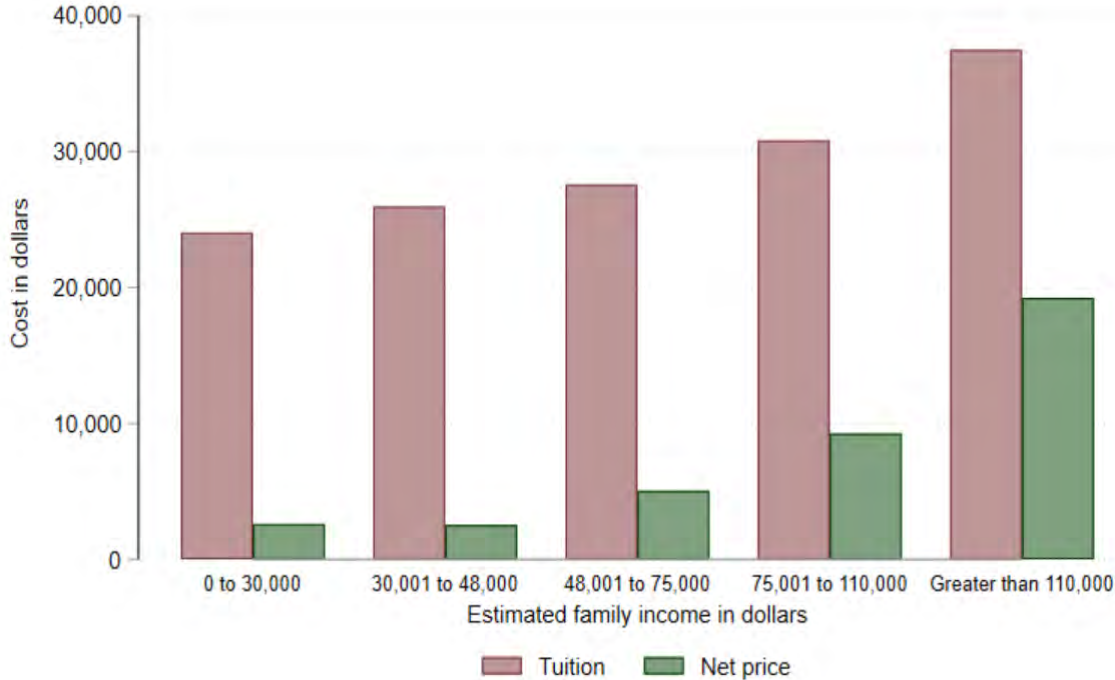
College selectivity levels for colleges applied (n=199,984)



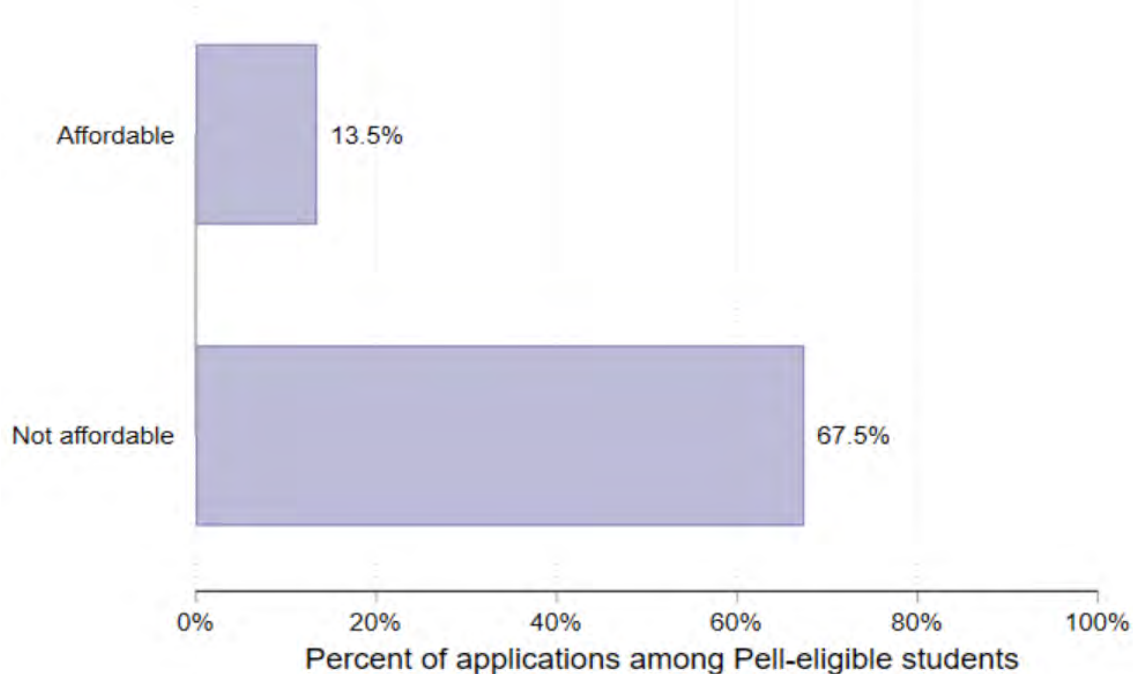
Note: Each square represents 1% of applications submitted to a given college selectivity level. Special or NA category encompasses colleges with undetermined Barron's ratings, colleges with specialized programs, or professional schools of art, music, nursing, and other disciplines.

On average, students tend to keep their options in-line with their estimated family income. For Pell-eligible students, many of the colleges they applied to came with substantial out of pocket costs.

Average tuition and net price for all colleges applied by estimated family income (n student-college pairs = 154,643)



College affordability among Pell-eligible students (n=124,357)

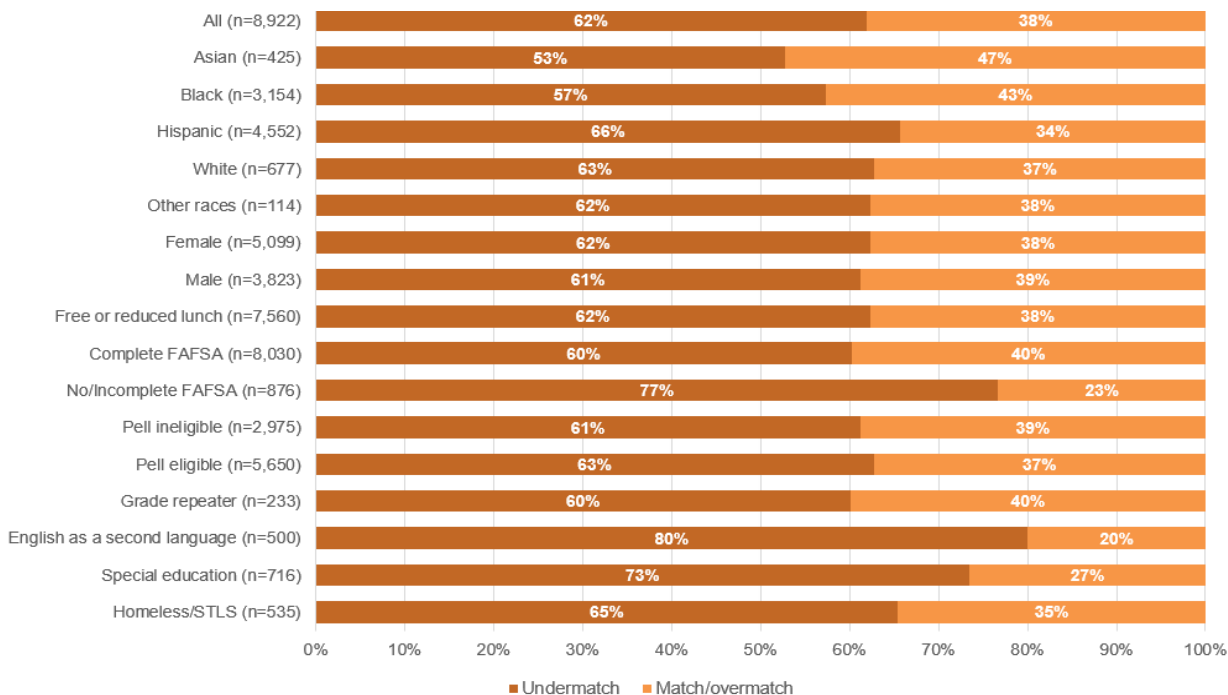


Note: The figure on the left only includes student-college pairs with non-missing data for both tuition and net price. The net price is calculated by subtracting financial aid from tuition and mandatory fee. The figure on the right does not include Pell-eligible students who applied to colleges with missing net price information from IPEDS. College affordability is defined using Moneythink’s (2021) metric for affordability, in which an affordable net price is below \$7,000 annually and an unaffordable net price is above \$7,000 annually. Unlike how net price is defined in the figure on the right, the net price in this figure takes into account books, supplies, room and board and other expenses to align with Moneythink’s definition.

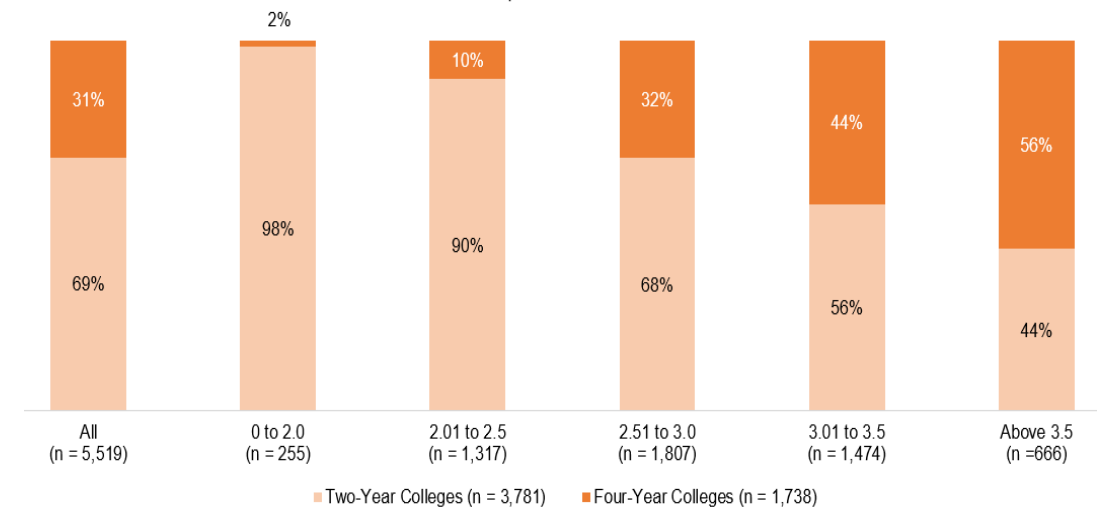
Key Findings in College Enrollment

62% of the class of 2018 enrolled in a school that is considered an academic undermatch. Two-year enrollment accounted for much of this undermatch

Percent of 2018 CPS seniors who enrolled in undermatch vs. match/overmatch colleges in total and by subgroup



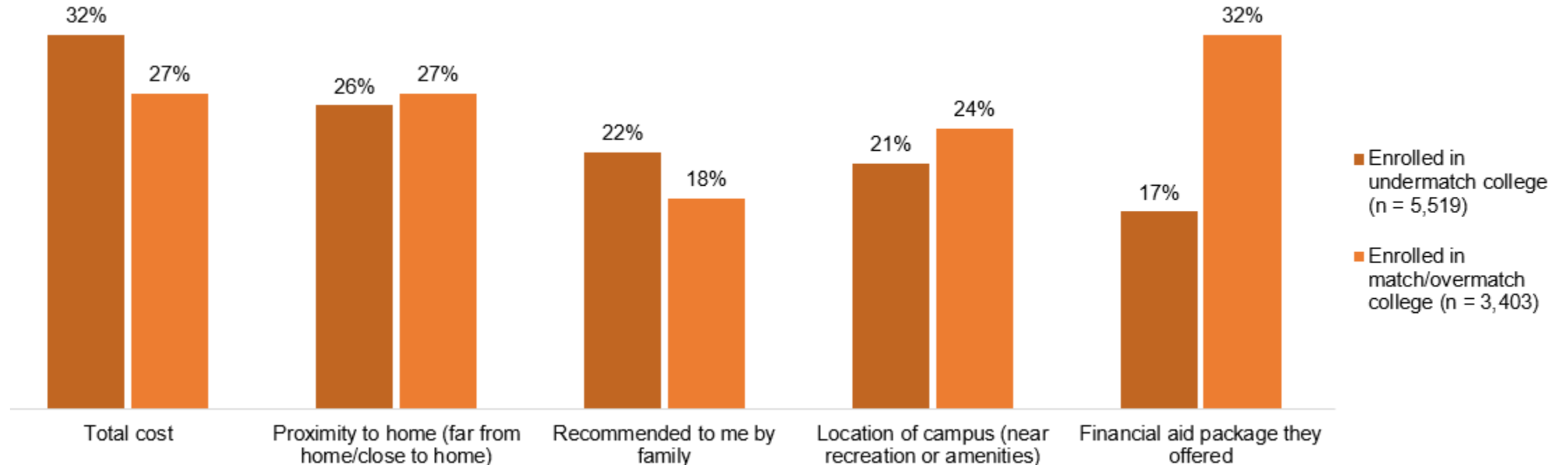
Percent of undermatch enrollment by institution level in total and by GPA (n = 5,519)



Note: The figure excludes 6,866 enrolled students who have missing information that prevents the calculation of academic match. These students either have missing student selectivity level or enrolled in special/unranked colleges. Other races include Asian/Pacific Islander, Native American/Alaskan Native, Multiracial, Pacific Islander/Hawaiian, and not available. Free or reduced lunch is used as a proxy for economic disadvantage. "Incomplete FAFSA" refers to cases when student filed the FAFSA but there is missing/incorrect information in the application that prevents the EFC calculation. Homeless/STLS indicates students who live in a shelter or are otherwise classified as homeless or Students in Temporary Living Situations.

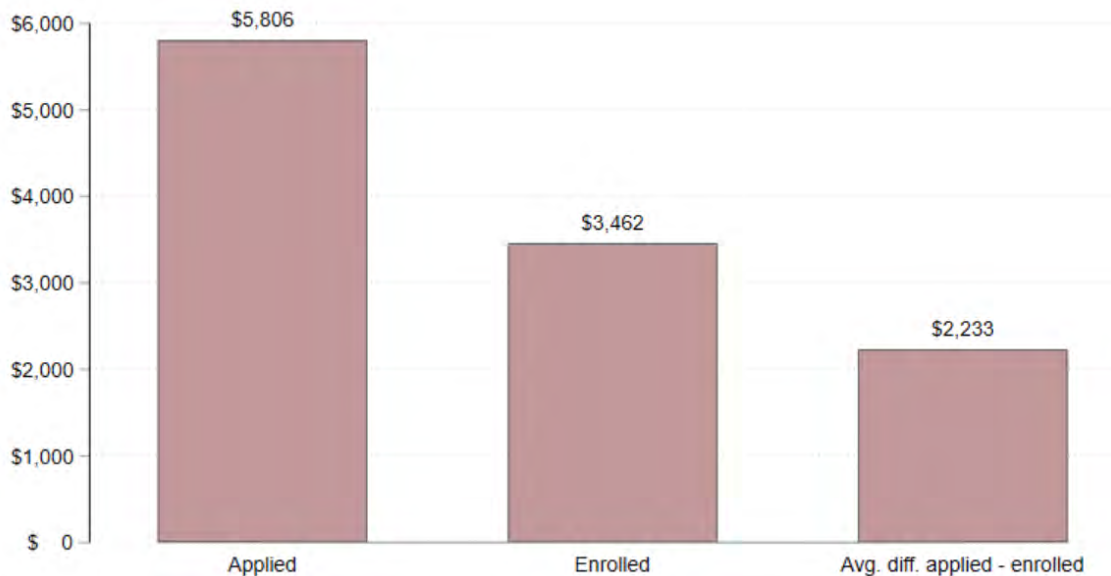
Total cost was the most influential factor in students' enrollment decisions, particularly for students who undermatch

Percentage of students enrolled in undermatch and match/overmatch colleges who ranked the following factors as the most influential factors in college choice (n=8,922)

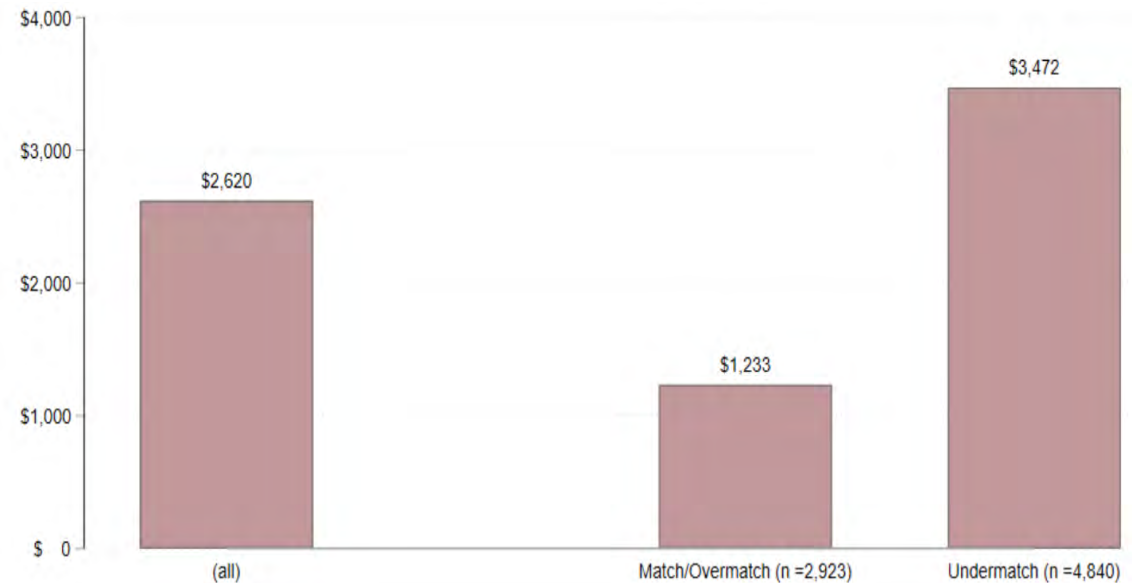


All students enroll in schools with lower net prices, but the difference is larger for students who undermatch

Average net price for all applied, enrolled colleges, and average difference in net price between applied and enrolled colleges (n=13,137)



Average of the difference in net price between all applied and enrolled colleges by academic match (n=7,763)



Students enrolled in CCC to financially contribute to their families, to stay close to home and in a diverse environment, and to overcome barriers posed by their immigration status

Finances

- Students saw their families struggle with layoffs and decreased work hours during the pandemic, and wanted to offer financial support
- Many students from low-income backgrounds aspired to attend college to secure a well-paying job after graduation

Location

- Students can remain in a city they're familiar with but can still have new experiences
- CCC provides a diverse and multicultural environment where students can connect with their peers

Immigration Status

- Undocumented students are often left without supports to navigate the college application process
- The STAR scholarship offers a chance for undocumented students to continue their education even if they are ineligible for financial aid due to their citizenship status

"When I was ready to apply, I think Trump had become president. So, my mom was like, 'Yeah, you're not applying.' And not because she didn't support me or anything, but because ***we were scared that, if he started deporting people, he would have targeted the DACA students first, just because now they had all their information and stuff.***"

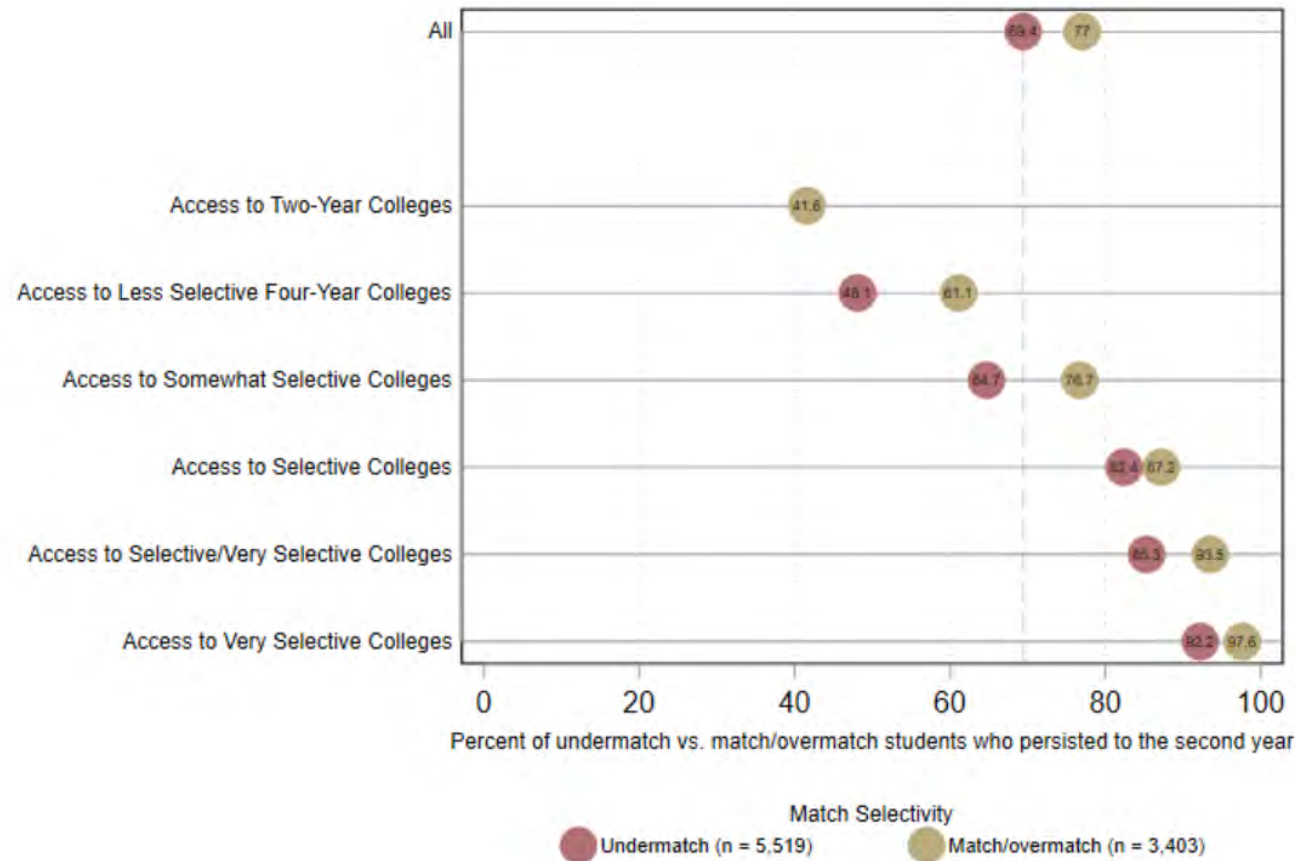
"It's like ***the first thought is what school best fits me financially? It's not, what school best fits me for my degree or for my personal choice?*** Unfortunately, it is financial."



Key Findings in College Persistence

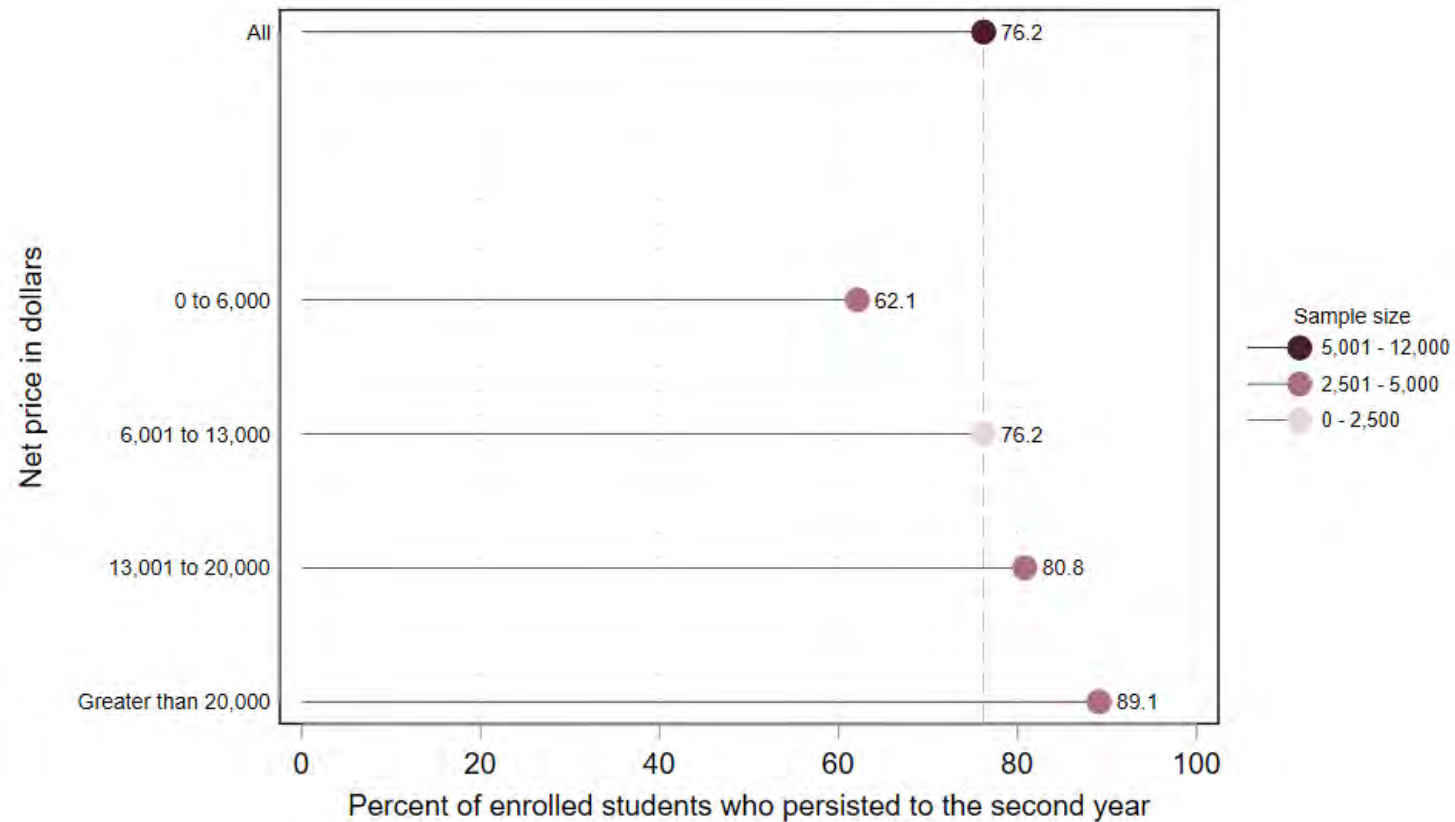
Students who enroll in match/overmatch institutions persist at higher rates than students with similar academic backgrounds who undermatch

Percent of undermatch vs. match/overmatch students who persisted to the second year in total and by student selectivity (n=8,922)



Schools with lower out of pocket costs also have lower year-to-year persistence

Percent of enrolled students who persisted to the second year in total by net price level (n=11,796)



Implications for Policy and Practice

Findings suggest that the cost of college is constricting students' ability to enroll in the school where they are more likely to be successful. To address this, we recommend:

Simplifying the financial aid process and ensuring students fully understand their financial options

- The financial aid process is unnecessarily complicated for students and their families and may lead to uncertainty that limits students perceived options. Future efforts by our research team in this area include exploring how financial aid award letters can be standardized and streamlined.

Providing students information about the actual cost of college earlier in the college application process

- Ensuring students are applying to affordable schools that are also a good fit socially and academically can ensure students face fewer tradeoffs when deciding where to enroll. Future work by our research team will help identify affordable institutions.

Target additional financial resources for students who stand to benefit the most

- By better understanding the scale of unmet financial need among CPS graduates, funders can craft financial supports that enable low-income students to attend the college that is best for them.

Provide holistic post-enrollment support services at more affordable institutions

- Research by our team and others has shown that holistic support services can dramatically increase persistence and graduation rates at less selective institutions.



Thank you!

Shantá Robinson, PhD

Principle Investigator, UChicago Inclusive Economy
Lab

srrobinson@uchicago.edu

Nhu Nguyen, PhD

Research Associate, UChicago Inclusive Economy
Lab

npnguyen@uchicago.edu

Felipe Hernandez

Project Manager, UChicago Inclusive Economy Lab

felipeh@uchicago.edu

Appendix

CPS-Barron College Selectivity Rating Mapping Table

Student Rating	Barron's College Rating	Examples
Very Selective Colleges	Most Competitive Highly Competitive + Highly Competitive Very Competitive +	Northwestern University Illinois Institute of Technology University of Illinois at Urbana Champaign Marquette University
Selective/Very Selective Colleges	Highly Competitive Very Competitive + Very Competitive	University of Illinois at Urbana Champaign Marquette University University of Illinois at Chicago
Selective Colleges	Very Competitive <u>Competitive +</u>	University of Illinois at Chicago Xavier University of Louisiana
Somewhat Selective Colleges	Competitive	Northern Illinois University
Less Selective Four-Year Colleges	Less Competitive Noncompetitive	National Louis University Harris-Stowe State University
Two-Year Colleges	Two-Year College	City Colleges of Chicago



Demographic Characteristics of Quantitative and Qualitative Study Sample

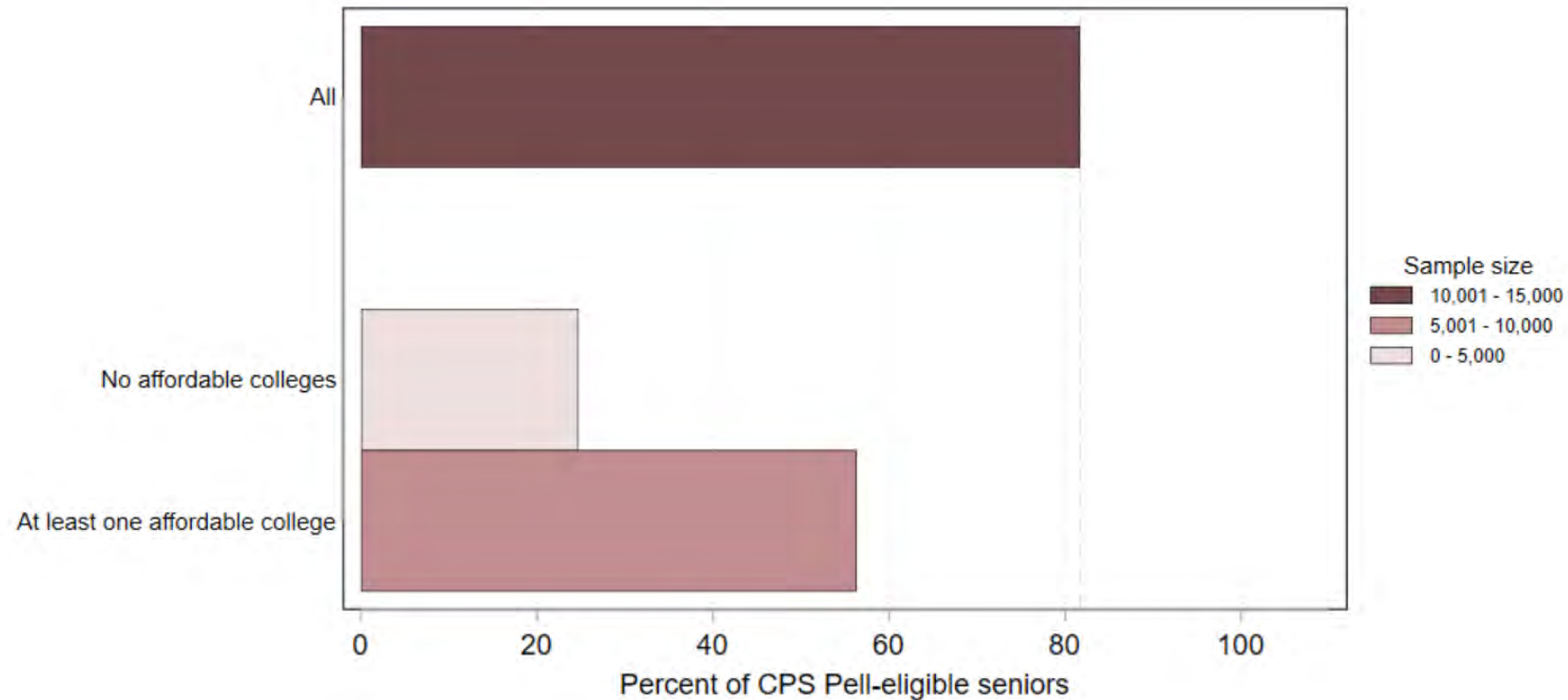
Demographics	Quantitative Sample (n = 27,148)	Qualitative Sample (n = 51)
Gender		
Female	50.5%	68.6%
Male	49.5%	31.4%
Race/Ethnicity		
Black	39.9%	*
Hispanic	45.6%	58.8%
Asian	4.1%	*
Asian or Pacific Islander	0.01%	None
Hawaiian or Pacific Islander	0.1%	None
Native American	0.3%	None
White	9.0%	*
Multi-racial	1.0%	*
Lunch Status		
Free or reduced lunch	83.3%	68.6%
Denied FRL	12.1%	23.5%
None	4.1%	*
Estimated Family Income		
\$0 to \$30,000	6.6%	*
\$30,001 to \$48,000	32.1%	33.3%
\$48,001 to \$75,000	34.2%	41.2%
\$75,001 to \$110,000	10.4%	*
Greater than \$110,000	6.4%	*
Education Funding Status		
FAFSA filed	70.8%	82.4%
FAFSA filed – but incomplete	3.2%	*
No FAFSA filed	24.0%	*
Estimated Pell Grant-eligible**		
Yes	57.9%	62.8%
No	30.5%	35.3%
Others		
Grade repeater	7.8%	*
English as a second language	6.2%	None
Special education	17.1%	*
504 Status	4.6%	*
Homeless	8.6%	*

Note: Estimated family income is determined by census tract level median family income derived from U.S. Census data associated with student addresses. “FAFSA filed – but incomplete” refers to cases when student filed the FAFSA but there is missing/incorrect information in the application that prevents the EFC calculation. Estimated Pell-grant eligibility is determined by having estimated family income below \$60,000. Values with counts <10 have been suppressed to preserve anonymity.



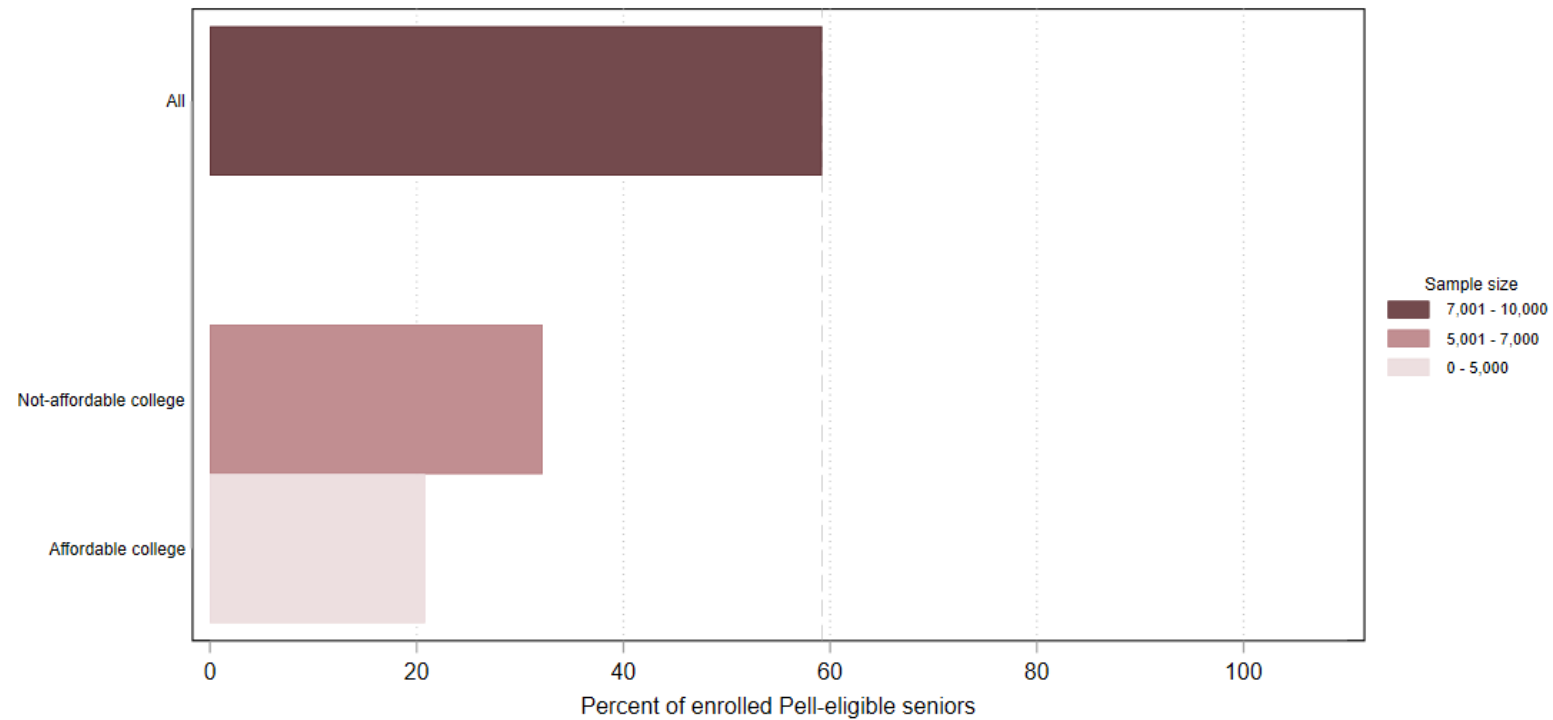
Only 56.3 percent of Pell-eligible students applied to at least one college that was affordable

Percent of CPS Pell-eligible seniors who applied to at least one college in total and by affordability status (n = 15,710)

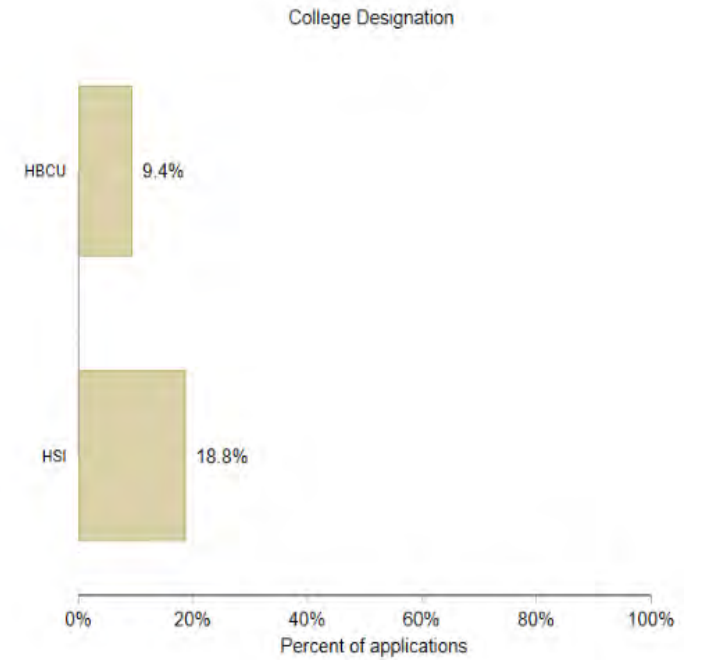
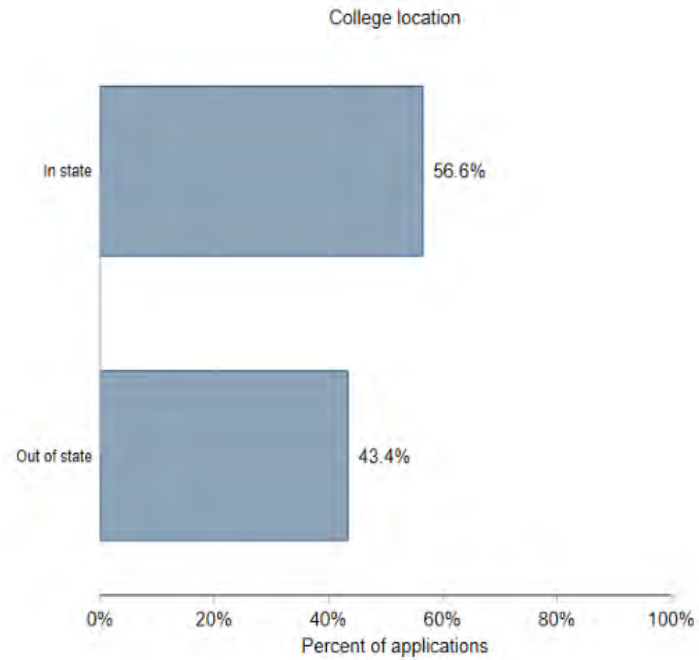
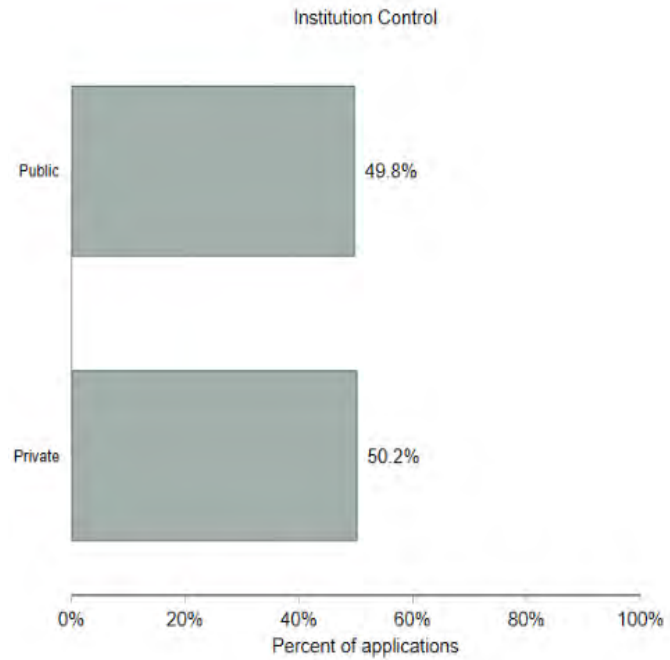


Only 20.8 percent of Pell-eligible students enrolled in a college that is considered affordable

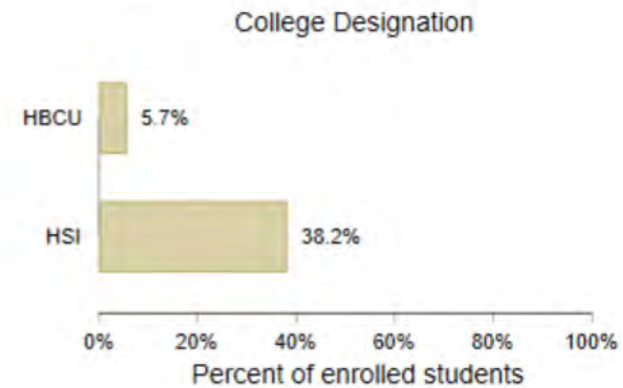
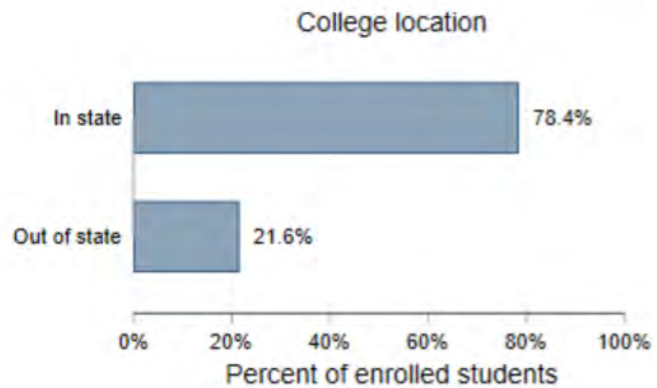
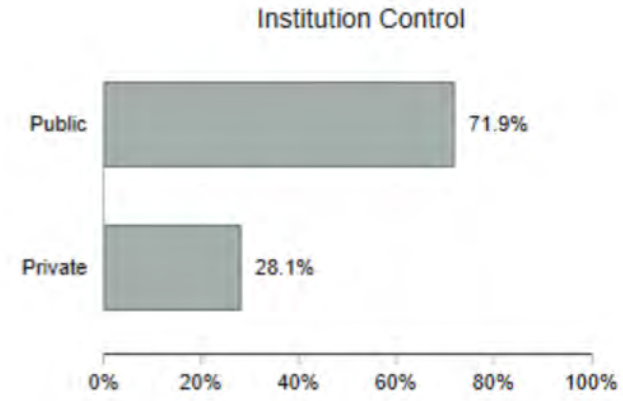
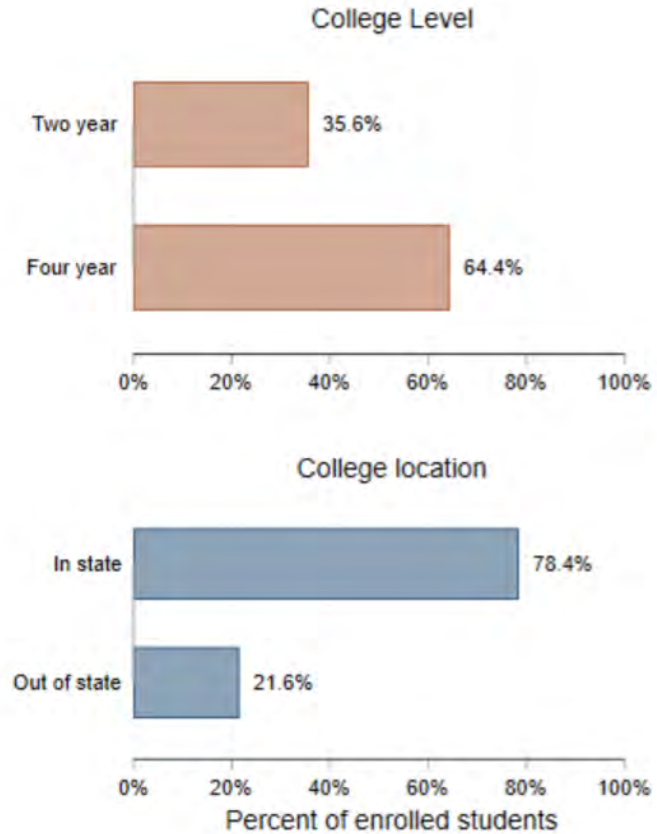
Percent of enrolled Pell-eligible seniors in total and by affordability status (n = 15,710)



Institutional characteristics of the applied colleges (n = 199,984)

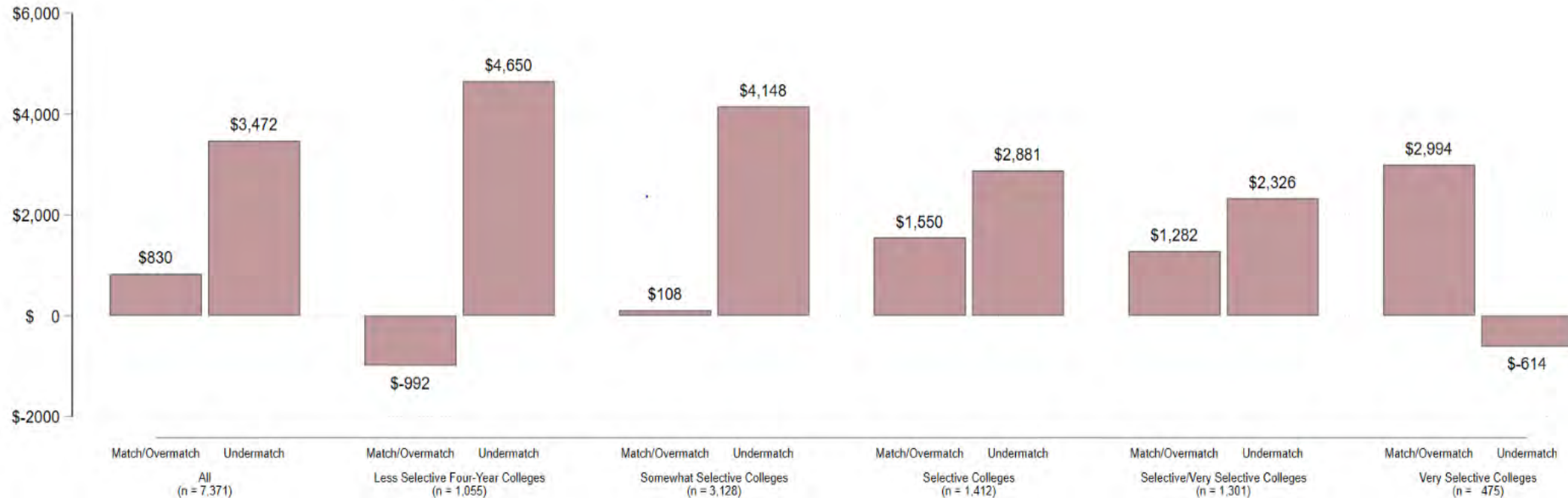


Institutional characteristics of the enrolled colleges (n = 15,489)



Students with access to less selective and somewhat selective colleges face the highest trade-off between academic match and affordability

Average of the differences in net price between all applied and enrolled colleges by academic match and student selectivity
(n = 7,371)



D1: Financial fit is a prerequisite to social fit but is surprisingly not the most important predictor to college persistence

Financial fit vs Social fit

- In nearly all cases, the financial fit factor was the sole determining factor in students' postsecondary choices

Selectivity and Persistence

- More selective institutions have higher retention and graduation rates
- Despite higher sticker prices, these institutions provide better resources and student support

Challenges for students of color

- Students who enroll in two-year colleges were least likely to persist
- These findings have the biggest implication on Black and Latinx students, who face unique challenges in persistence and degree attainment



D2: High school college-going culture is significant, but more college preparation may be needed

Complexity of the college application process

- Students often underestimate the complexity and time commitment required for informed decision-making

Undermatching and persistence implications

- Students initially apply to academically matched and overmatched colleges, but during the exploration and enrollment periods, they switch to less selective colleges where they are overqualified to attend

Developing a college-going culture

- Students at under-resourced schools may lack prior experiences that foster college readiness
- School staff may need to exert extra effort to foster a college-going culture. Encourage student aspirations, provide guidance, and explore interventions within existing frameworks



D3: Higher education credentialing continues to be the goal for students, but college affordability remains a barrier

Meeting expectations and doing everything right

Took rigorous courses

Scored well on standardized test

Engaged in extracurricular activities

Applied to multiple colleges, scholarships, & FAFSA

What's missing for these students?

Explicit discussions with their families and caregivers regarding their real financial status and the full cost of college

