The Effects of the College Advising Corps on Student College Application Behaviors in North Carolina

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Introduction

North Carolina has set an ambitious educational attainment goal for the state: 2 million North Carolinians with a postsecondary credential by 2030[1]. Increasing the number of students who apply to college in the state is necessary to achieve this goal. In the Fall 2020 application cycle, approximately 61,000 of North Carolina's 108,000 public school seniors applied to attend institutions in the University of North Carolina (UNC) System. Specific populations were underrepresented among these applicants relative to their share in public school enrollments. In particular, Hispanic students represented 19 percent of students in public schools, yet they constituted only 11 percent of the postsecondary applicant pool.

One strategy for increasing college application rates in the state, particularly among historically under-served populations, is to help students during the college application process, which is often complicated and requires students to complete many steps[2]. Like those provided by nonprofits such as the College Advising Corps (CAC), college advisers are a critical way of providing this assistance[3]. This type of service may be particularly transformational for first-generation, low-income students and students of color who often do not have access to people in their homes, schools, and communities who have experience applying to college.[4]

Founded in 2005, CAC places recent college graduates in secondary schools to provide college advising resources. The primary objective of CAC is to increase the college enrollment rate among first-generation college students, those from low-income families, and those from traditionally underrepresented backgrounds in higher education. To accomplish this goal, CAC advisers provide services aligned with six Key Performance Indicators (KPIs), including activities like 1:1 meetings and college application submissions, which the organization chose due to their positive relationship with college enrollment. In addition to encouraging students to enroll in college, advisers work to help students enroll in colleges that are a good academic match and personal fit. This "match and fit" framework is important for students' future success, as students are more likely to perform well and persist if they attend an institution that meets their academic and personal needs.

CAC began serving North Carolina in 2007, drawing advisers from graduates of UNC Chapel Hill. The program has since expanded to five additional campuses, recruiting graduates from Duke University, Davidson College, North Carolina State University, UNC Wilmington, and Appalachian State University. The five current CAC Programs in the state, which include all of the above except for Davidson, served over 21,000 seniors at 122 high schools during the 2022–23 school year.

This brief is the second in a series that examines the relationship between the presence of CAC advisers and students' college-going behaviors in North Carolina. The first brief focused on how CAC advisers help students apply for financial aid. Here, we focus on another of CAC's KPIs: college application submissions. Using data from the UNC System Office and CAC, we highlight the relationship between North Carolina CAC advisers and students' college application behaviors.

Our analyses suggest that assigning a CAC adviser to a high school led to the following:

- An increase in the number of applications from CAC high schools to any campus in the UNC System. These effects are pronounced among Hispanic students.
- Parallel to the increase in the number of applications, our findings also suggest an increase in the number of unique students who applied to a UNC System campus, with a particular rise in application submissions from Hispanic students.
- The number of applications per student to the UNC system increased, but the change was not statistically distinguishable from "no difference" using traditional reporting criteria.

Key Findings

1. An increase in the number of applications from CAC high schools to any of the campuses in the UNC System.

Our first set of analyses focused on the number of college applications for first-year admission sent from CAC high schools to the 16 constituent UNC System institutions. This outcome is measured at the high school level and tracks the number of applications flowing from a given high school to the UNC System. Our analysis relies on a quasi-experimental method known as an event study.[5] This approach compares changes in application submission at high schools before and after CAC advisers were posted versus similar high schools in the state that do not have a CAC adviser[6]. Ultimately, this method allowed us to isolate the effect of a CAC adviser from other influences that may affect application submissions. Due to limitations in the years available in our data, we estimated the effect of CAC on outcomes for schools that implemented the intervention after 2010 and before 2020 and had senior classes in years prior to the intervention (109 high schools[7]). Figure 1[8] illustrates a general upward tick in the number of applications per school after the introduction of a college adviser. In particular, our findings suggest applications increased by 10 and 18[9] percent in the second and third years after CAC began working with the high school. This is equivalent to an increase of between 18 and 33 more applications per CAC high school, when compared to the year prior to the intervention.

| Figure 1 | Comparative Change in Applications to UNC System Institutions from CAC High Schools |
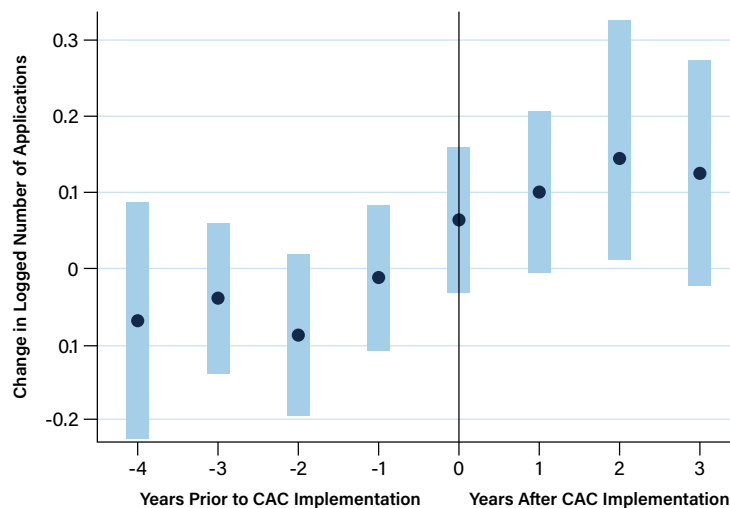
We also explored whether this effect was evident among specific underserved populations, mainly Pell-eligible students, and Black and Hispanic students. We found that the number of applications from Hispanic students increased between 30 and 44 percent, or about 4-7 applications per high school, in each of the four years after introducing a CAC adviser. We also observed increases in applications from Black and Pell-eligible students, respectively; however, these increases could be due to chance and not resulting from placing CAC advisers because traditional statistical criteria for reporting treatment effects were not met.

| Figure 2 | Comparative Change in Hispanic Student Applications to UNC System Institutions from CAC High Schools |
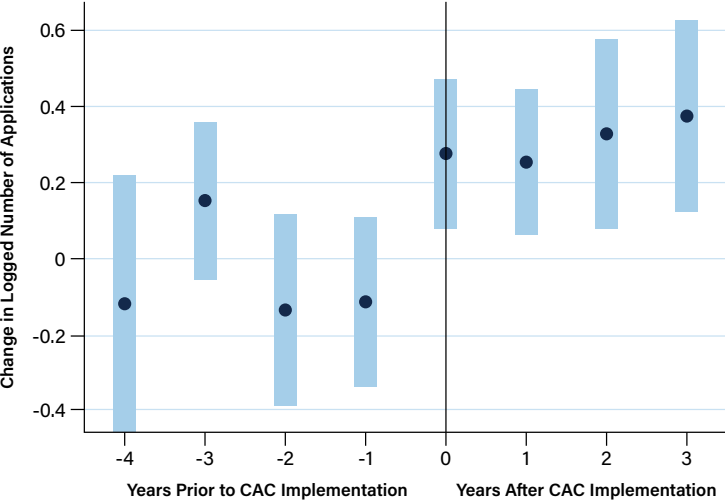
2. Parallel to the increase in the total number of applications, there was also an increase in the number of unique students who applied to a UNC System campus, with a particular rise in application submissions from Hispanic students.

In Key Finding 1, we observed an increase in the number of applications sent from CAC partner high schools to the UNC System. In the second part of the overall analysis, we examined whether this increase was driven by CAC advisers encouraging more students to apply to the UNC System instead of the same number of students submitting more applications. Figure 3 illustrates that the number of unique applicants to UNC System institutions from CAC high schools increased after the introduction of an adviser. In particular, the number of applicants per school increased by 8 and 12 percent (8-12 students per high school) in the program's second and third years.

Figure 3

Comparative Change in Unique Applicants from CAC High Schools to UNC System Institutions
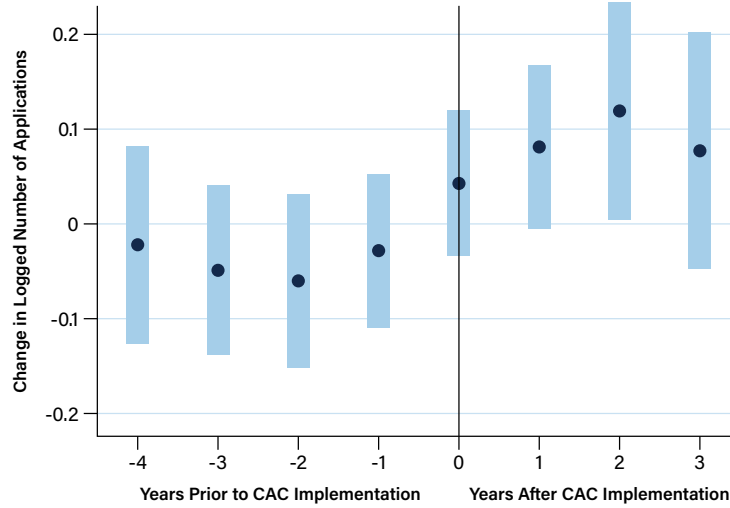
As in our previous analyses, we found that CAC influenced Hispanic students' application behaviors, as seen in Figure 4. We found that the number of unique Hispanic applicants increased by between 22 and 33 percent (2-3 students per high school) in the four years after the program. As above, we also observed increases in the number of unique Black applicants and a slight decrease in the number of Pell applicants, but these results did not meet traditional statistical criteria for reporting treatment effects.

Figure 4   Comparative Change in Unique Hispanic Applicants from CAC High Schools to UNC System Institutions
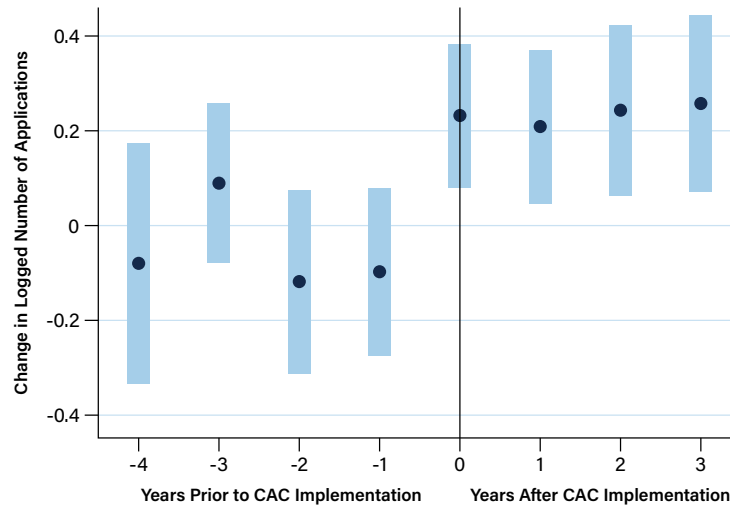
3. The number of applications per student to the UNC system increased, but the increase was not statistically distinguishable from "no difference" using traditional reporting criteria.

It is possible that the increases in the number of applications to the UNC System reported in Finding 1 result from more students applying to UNC System schools than they would have in the absence of a CAC adviser (Finding 2). It is also possible that these increases were driven by individual students submitting applications to multiple colleges in the UNC system. Figure 5 offers little evidence to support this second possibility, as there do not appear to be consistent changes in the number of applications per student after a CAC adviser started working in a high school and traditional statistical criteria for reporting treatment effects were not met. Analyses among subgroups suggest an increase in the number of applications per student for Hispanic and Pell students and a decrease among Black students. However, like above, these results were not statistically significant and could be due to chance.

Figure 5

Comparative Change in Applications Per Student to UNC System Institutions for CAC High Schools
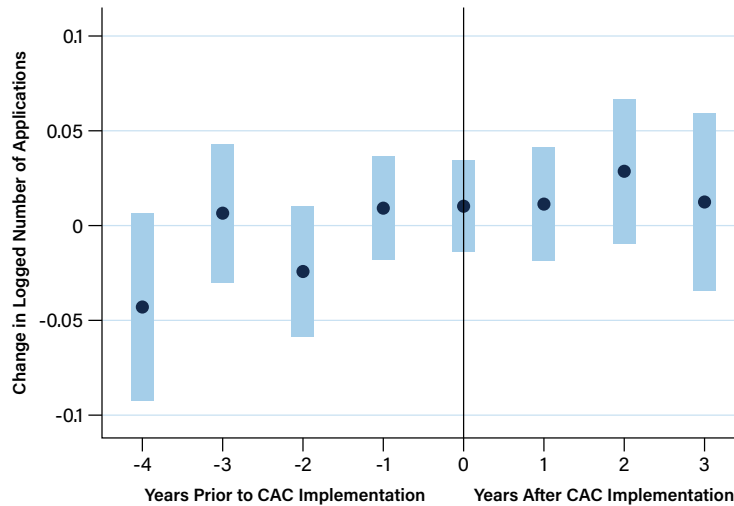
Discussion

These results offer evidence of CAC advisers influencing students' college-going behaviors. We found that the presence of a CAC adviser results in increased applications from more students to UNC System campuses from the high schools they served, particularly among Hispanic students. This increase appears to be driven by more students applying to the UNC system than would have in the absence of a CAC adviser. This suggests that CAC advisers helped encourage applications to the UNC System from students who might have hesitated about applying there. This finding aligns with prior research suggesting that the benefits of pre-college advising efforts are typically enhanced among students of color[10]. This finding also aligns with CAC's goal of increasing college enrollment of usually underrepresented students in higher education.

Although we observed that CAC advisers might influence students' college application behaviors within the context of UNC System schools, data limitations meant we could not investigate effects outside North Carolina's four-year public colleges. Indeed, CAC internal data suggests that a large proportion of CAC-served students apply and enroll in community colleges, private, and out-of-state institutions. As such, we were unable to capture the full influence of CAC advisers on student college-going behaviors. Further, we did not examine acceptance rates among students eligible for admission to the UNC system. It is possible that CAC advisers help students better hone their application list to include a set of colleges that maximizes their chances of acceptance. Finally, we were unable to assess the percentage of students within a school eligible to attend a UNC System institution, but either chose not to apply or applied elsewhere. This limitation precluded us from determining whether CAC advisers are reaching populations of students who were on the margin of applying to college. Future work should examine these unanswered questions to understand other areas of CAC's influence.

The results of this work support several key recommendations for CAC moving forward.

- CAC should continue its efforts to increase applications to public four-year colleges. Other than community colleges, these institutions are often the most affordable route to a Bachelor's degree, especially for low-income students.
- CAC should consider a robust investment in internal data systems within the organization to better understand its effect on students' college-going journeys. CAC currently relies on advisers to self-report information about their students' college applications. As such, CAC's data on this topic are likely incomplete, and evaluators must depend on external administrative data to assess outcomes, such as college application behaviors, as in these analyses.

About Us

The Education Futures Initiative is a multi-disciplinary project that is data-driven, evidence-based, and action-oriented. The initiative brings together faculty affiliates at the University of North Carolina at Chapel Hill with expertise in education policy and rigorous research methods from across academic disciplines— including education, public policy, economics, and sociology—to answer questions and identify high-leverage, evidence-based programs vital to North Carolina's efforts to improve educational attainment and economic development.

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Endnotes

1   MyFutureNC (n.d.). A call to action for the state of North Carolina. www.myfuturenc.org/wp-content/uploads/2019/04/A-Call-to-Action-Final-Report_040319.pdf

2   Klasik, D. (2012). The college application gauntlet: A systematic analysis of the steps to four-year college enrollment. Research in Higher Education, 53, 506–549. doi.org/10.1007/s11162-011-9242-3

3   Clayton, A.B. (2019). Helping students navigate the college choice process: the experiences and practices of college advising professionals in public high schools. The Review of Higher Education 42(4), 1401–1429. doi:10.1353/rhe.2019.0070

4   Perna, L.W. (2006). Studying college access and choice: A proposed conceptual model. In: Smart J.C. (Eds.). Higher Education: Handbook of Theory and Research, 21, 99-157. Dordrecht: Springer.

5   Huntington-Klein, N. (2022). The effect: An introduction to research design and causality. CRC Press.

6   The comparison group contained 285 public high schools. We excluded charter schools, alternative and vocational schools, and schools not open all years in the panel to best reflect our treatment sample.

7   For our analyses examining the behaviors of Pell recipients, our first year of data was 2014. Therefore, we were unable to include schools that introduced an adviser prior to this year, which limited our sample for those analysis to 64 high schools.

8   The X-axis in this figure and those that follow indicates the year in which the outcome of interest is measured, with 0 being the year CAC began working with the high school, –1 being the year immediately before the partnership, and 1 being the year after the partnership started. A vertical blue line separates the pre– and post–CAC time periods in year 0. The Y-axis indicates the size of the CAC effect on the outcome of interest. The shaded blue area around the dots represents the range of statistically plausible changes in application submission. given our sample size. In all models we control for HS level characteristics that could impact college going including school characteristics such as racial/ethnic composition, percent of students on FRPL, size of senior class, school locale, and title 1 status. We also control for community characteristics like unemployment rates, percent in the county in poverty, and median household income. Finally, we control for other interventions that may impact college going such as local college promise programs.

9   To transform regression coefficients seen in the graphs from logged outcomes to percent changes, we exponentiated the coefficient, subtracted 1 and multiplied that number by 100. This same procedure applies to the remainder of the analyses with logged outcomes.

10   Bettinger, E.P. & Evans, B.J. (2019). College guidance for all?: A randomized experiment in pre-college advising. Journal of Policy Analysis and Management, 38(3), 579–599.