
A New Transfer Advising Model to Promote Increased Student Transfer Success: A Mixed-Methods, Action Research Study

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Abstract: For students traversing transfer bridges from community colleges to universities, advising plays a critical role. In partnership with two community colleges and one university, we developed a new transfer advising model to help underserved students more successfully transfer. The two-plus-two advising model spanned both institutions, but for treatment group students ($n=23$), their advisers stayed the same across institutions, unlike a more traditional transfer advising model experienced by control group students ($n=33$). We used archival enrollment, survey, and interview data to examine the efficacy of this model. We found that treatment group students were significantly more likely to persist through transfer and university enrollment, be satisfied with their transfer advising experiences, and perceive increased transfer student capital. Other findings and implications are included.

Keywords: advising approaches, advising models/structures, community college, culturally diverse students, practitioner/applied, transfer student

INTRODUCTION

Many universities are serving increasing numbers of students taking community college paths toward earning their baccalaureate degrees at four-year institutions. Yet traditionally underserved students, including relatively high numbers of first-

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generation, low-income, and primarily Latinx, are at higher risk of not completing their baccalaureate degrees (Dhupelia, 2023; Fink & Jenkins, 2017; Umbach et al., 2018). Given that academic advising is known to be one of the most important factors affecting student retention and degree completion (Afzal et al., 2024; Metzner, 1989; Soria, 2012), providing a seamless transition between institutions through better support systems might help, especially based on the current research (Barger, 2023; Council for the Advancement of Standards in Higher Education, 2018; Cuseo, 2019; Drake, 2011; Institute for Higher Education Policy, 2023; Joseph & Poisel, 2018; Metzner, 1989; Wyner et al., 2016). “As institutions seek to increase and diversify enrollments, academic advisors are *vital* [emphasis added] to ensuring appropriate matriculation and transfer leading to degree completion for all students” (Council for the Advancement of Standards in Higher Education, 2018, p. 3).

For this study, we implemented a new transfer advising model to increase primarily Latinx students’ transfer success. This new model, initially implemented before the pandemic in 2013, after which it was expanded from one to two locations in 2019, was developed to provide a more seamless transition between institutions via a *joint* or *two-plus-two* model, with the latter terminology used at the university to which students transferred and the former *joint* terminology used more generally (see, for example, Barger, 2023; Cuseo, 2019; Institute for Higher Education Policy, 2023). The goal was to mitigate the barriers of transfer with a singular point of academic advising, which meant a singular academic adviser assigned to each transfer student, from the first year at the two-year college through graduation from the four-year university (ideally) four years later, with no transitions in the advising relationship or process between institutions. That is, students in this the two-plus-two model were advised by the same adviser all four (plus) years of their schooling, including while transitioning from their community college to the university.

Because of the pandemic, we implemented (or were forced to implement) this relatively new, two-plus-two advising model virtually. Students in the study (i.e., our treatment and control group students), all with predeclared intents to transfer to the same university in the fall of 2020, had to go through the transfer application process, their orientations, their campus visits, and their student advising experiences virtually. Clearly, this was not akin to the experiences of other cohorts of students, but doing this was particularly important at the time, given that student transfer enrollment from two-year colleges to bachelor’s degree programs was declining. These declines have since been evidenced across the United States (U.S.), both during and after the pandemic (National Student Clearinghouse Research Center, 2022).

However, because of financial and human resource constraints during the pandemic, only treatment group students at one of the two-plus-two sites were permitted to persist in the newer advising model. Control group students were required to engage with the more traditional advising model that had been in place for years, well before this two-plus-two model was put into place. While all students involved in this study transferred from their community colleges into the same

university at a time advising program leaders of all university advising programs needed to change and adapt most everything given the pandemic, an effort was made to not further disrupt transferring students' trajectories from their community colleges into this four-year university. The advantages of the two-plus-two advising model for treatment group students was only theoretical given the effects of the advising model had not been examined or assessed at the time.

LITERATURE REVIEW

Research shows academic advising impacts transfer students' experiences by contributing to students' levels of satisfaction and perceptions of support, particularly during periods of transition between two- and four-year institutions. This was foundational to developing the two-plus-two advising model of interest in this study. The more students meet with their advisers, the higher students' retention and likelihood of success (Afzal et al., 2024; Crisp & Nora, 2010; DeLaRosby, 2017; Jackson & Laanan, 2015; Swecker et al., 2013; Townsend & Wilson, 2006).

While positive (cor)relationships between students' satisfaction in higher education and retention have been established historically (see, for example, Afzal et al., 2024; Pascarella et al., 1986), student satisfaction with advising has also been shown to predict students' satisfaction with their institutions. Bowles et al. (2024) found that students working with advisers who provided individualized support helped students to better engage in their learning, expand their thinking, and support their overall well-being. These students were more likely to persist toward attaining a baccalaureate degree. DeLaRosby (2017) noted that campus residency, time spent interacting with faculty, and the quality of such interactions were statistically, and practically significant satisfaction factors related to pre-baccalaureate students' persistence. Swanson and Cole (2022) added that the frequency of interactions with students' advisers and simultaneous feelings of academic validation were also positively associated with students' senses of belonging and mattering. From these and other studies, it seems students' levels of satisfaction are related to their persistence and ultimate graduation rates (Randolph, 2024). Students who are more involved in their institutions, having built relationships with their advisers, are those most satisfied with their educational experiences and those who are reportedly more satisfied with their transfer experiences, yielding more positive experiences upon and after their arrivals at their landing universities (Bowles et al., 2024; Crisp & Nora, 2010; DeLaRosby, 2017; Jackson & Laanan, 2015).

However, there is still growing evidence that underserved students experience lower levels of satisfaction with academic advising than their similar peers, with White students being more likely to be satisfied with academic advising. This underscores the need for more "supportive environment[s] for students of color who transfer" (Berger & Malaney, 2003, p. 18; see also Kruse et al., 2024; Lyn et al., 2022), especially given underserved students have lower levels of advising satisfaction when their advisers are ineffective with interpersonal communications. Brown et al. (2021) added that being first-generation Latinx college students and

receiving financial aid were the most significant risks of attrition, both of which were mediated by an advising model involving peer mentoring, academic coaching, and augmented academic advising (see also Young-Jones et al., 2013).

Likewise, lower levels of satisfaction among underserved students are often attributed to differences in their academic and social integration, especially given the professional- and peer-based relationships and opportunities realized (Tinto, 1975, 2017, 2022, 2023; see also Einarson & Matier, 2005; Fincham et al., 2021; Pascarella et al., 1986). Underserved students simply need more advising assistance, especially given these students do not have comparable levels of human capital, by which they accumulate knowledge and skills throughout their lives (see, for example, Kousar et al., 2023), and cultural capital, by which underserved students experience comfort, acceptance, and fit in higher education institutions (Kai, 2023; see also Nora, 2004).

For Latinx students, specifically, Brown et al. (2021) found that Latinx students' retention was most dependent on a combination of peer mentoring, academic coaching, and academic advising sessions. Suarez (2003) found that identifying with an adviser with a similar background or set of collegiate experiences during transfer was most important in increasing student self-confidence to persist (see also Roscoe, 2015). Related, Latinx students (and other underserved students) realize more challenges post-transfer, often caused by transfer shock—the academic and social jolts students experience post-transfer (Kirk-Kuwaye & Nishida, 2001; Lakin & Elliott, 2016). Hallett et al. (2020) highlighted how well-designed and implemented advising programs might better help underserved students succeed (see also Rendon, 1994, 2021).

Overall numbers of students transferring from community colleges into universities are still quite low, and of those who transfer, relatively few complete a bachelor's degree (Bailey et al., 2015). Even though post-COVID-19 trends show some promise given “ongoing efforts to streamline the transfer process during the pandemic to reduce inequities in access to bachelor's degrees,” the data also show that “not all student groups have been able to leverage [such] opportunities” (Huie et al., 2021, p. 2).

Hence, it is important to underscore that as institutional agents, academic advisers positively contribute to students' success during transitional experiences. Advisers substantively help with transitions through advising interactions, building relationships, and the like, all of which impact transfer students' self-efficacy and expectations, ultimately helping them persist (Berger & Malaney, 2003; Dawson & Dell, 1997; Fink & Jenkins, 2017). Improving transitions for transfer students from underrepresented groups is, therefore, important (Brown et al., 2021; Dawson & Dell, 1997; Packard & Jeffers, 2013).

THEORETICAL FRAMEWORKS

Three theoretical frameworks informed this new two-plus-two advising model. We relied on Tinto's (1993, 2017, 2022, 2023; see also Fincham et al., 2021; Levin & Levin, 1991; Liu & Liu, 2000; Pascarella et al., 1986; Schreiber et al., 2014;

Stewart et al., 2015) longitudinal model of student departure to highlight the importance of social and academic interactions, integrated with students' goals and commitments, as key elements influencing student decisions to persist. Tinto (1993) originally identified six components influencing students' decisions to depart from higher education (i.e., students' pre-entry attributes, goals/commitments, social/academic experiences, social/academic integration, re-evaluated goals/commitments, departures). We considered each of these components as key when academic advisers initiate advising interactions, enforce academic expectations and requirements, and serve as mentors, advocates, and supporters of students (see also Tinto, 2017, 2022, 2023).

We also drew upon Laanan et al. (2010) model of transfer student capital (TSC). TSC is defined in this study as community college students' accumulation of knowledge to help them successfully negotiate transfer processes and challenges (e.g., confusion surrounding credit transfers, course prerequisites, professional connections, and admissions). Laanan et al. (2010) developed TSC as a predictive model for social transfer adjustment given the cumulative knowledge gained by community college students transferring into four-year institutions, with the more cumulative knowledge possessed indicating a greater likelihood of successful transfer. TSC includes factors such as advising experiences, perceptions of transfer processes, experiences with faculty, and academic skills (Laanan et al., 2010). Advisers, as institutional agents who provide specific informational capital to students, help them develop personal and academic skills contributing to TSC (Allen et al., 2014; Bensimon & Dowd, 2009; Flaga, 2006; Maliszewski & Hayes, 2020; Stanton-Salazar, 2011). While students also acquire TSC from high school, family, peers, other advisers, and faculty, reinforcing Laanan et al. (2010) conceptualization of TSC, students with more TSC are most likely to be successful, especially during and after such transfers, given their levels of self-efficacy and empowerment, which leads to positive perceptions of transfer (Maliszewski Lukszo & Hayes, 2020; Stanton-Salazar, 2011). The more TSC a student possesses, the greater the likelihood of successful transfer (Laanan, 2001, 2007).

From an advising perspective, we used Bloom et al.'s (2008) model of appreciative advising to expand students' social and academic integration to deeper personal advising relationships with students, thereby aiding students to identify and ultimately reach their educational goals. Bloom et al. (2013) define appreciative advising as "a framework for leading higher education institutions, delivering truly student-centered services, and guiding higher education professionals' interactions with students" (p. 5). Hence, we used Bloom et al.'s (2008) framework to emphasize "the intrinsic, ontological value of each student encountered" (p. 7), more specifically focusing on the six phases (or six Ds) of appreciative advising: Disarming (i.e., creating safe welcoming environments for students), Discovering (i.e., using questions to draw out students' strengths and passions), Dreaming (i.e., helping students formulate visions for their futures), Designing (i.e., helping students develop goals), Delivering (i.e., helping students follow through with their

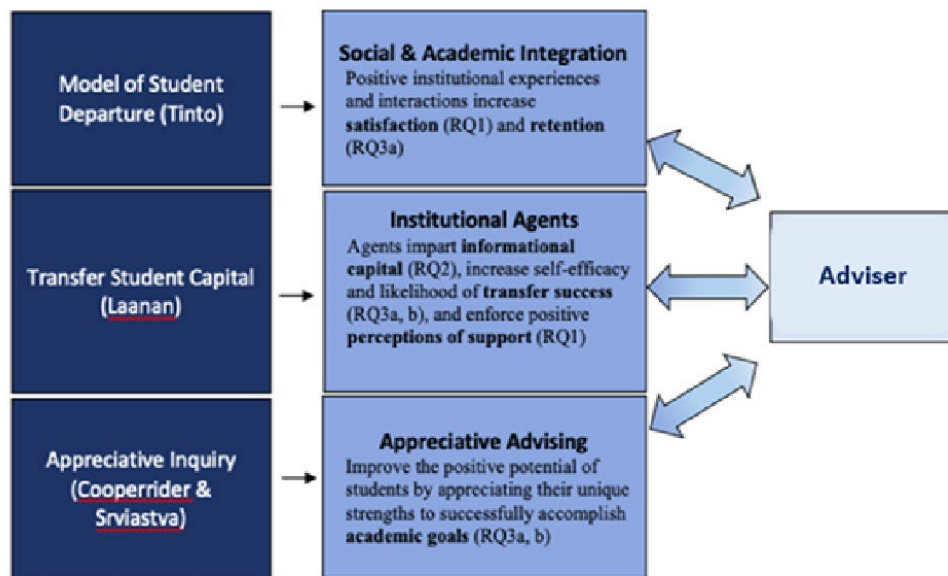
goals), and Not Settling (i.e., Don't Settle, helping students increase their self-expectations to optimize their educational experiences).

Appreciative advising is grounded in Appreciative Inquiry (AI), a strengths-based organizational development approach first articulated by Cooperrider and Srivastva (1987). Appreciative Inquiry is defined as a collaborative, inquiry-driven process that seeks to identify and build on the best of “what is” to inspire and design “what could be.” Rooted in positive organizational scholarship, AI focuses on recognizing assets, cultivating possibility thinking, and co-constructing future-oriented paths for improvement. Appreciative advising directly extends these principles to higher education by applying AI's core logic to advisor–student interactions—centering strengths, fostering aspiration, and collaboratively designing pathways that honor students' lived experiences and goals.

In sum, we used these three theoretical frameworks in this two-plus-two advising model to underscore the importance of social and academic integration, information capital (e.g., TSC), and an appreciative mode of advising inquiry to transfer student success. The common thread across these concepts was the necessity of advising agents (i.e., jointly appointed advisers) to help students develop social and academic integration and stay on course to achieving their academic goal.; Advisers employing appreciative advising techniques encourage student integration and success in reciprocal student-adviser relationships that build TSC and support persistence and commitment. Figure 1 illustrates the convergence of our three theoretical models (i.e., student departure, TSC, and appreciative inquiry) on three concepts of importance informing this two-plus-two advising intervention: (1) social and academic integration of the student with the institution, (2) institutional agents to build transfer student capital, and (3) appreciative advising techniques to build student self-efficacy towards achieving academic goals.

Figure 1

Theoretical Frameworks Informing this New Joint Advising Model



STUDY CONTEXTS

As noted, various community-college transfer student support systems have been implemented by higher education institutions nationwide. These include but are not limited to mentoring programs, defined as programs meant to facilitate learning relationships or connections between more experienced and less experienced student participants (Blaylock & Bresciani, 2011; Hodges, 2019; Tinto, 1993); articulated transfer pathways, defined as mapped course sequences and prerequisites needed to help students successfully transfer their courses into four-year institutions (Wyner et al., 2016); bridge programs, defined as transitional academic programs designed to provide additional supports to community college transfer students in the summer between their last term at college and first term at the university (Blaylock & Bresciani, 2011); and joint or two-plus-two advising programs, which embed university advisers into community college advising centers in order to provide more direct university transfer advising. Again, this final system was the model of interest in this study.

The joint or two-plus-two system of advising support is very different than most traditional models that students follow when transitioning from a community college to four-year institutions. While joint academic advising is known to be one of the most important factors affecting student retention and ultimate degree completion (Barger, 2023; Council for the Advancement of Standards in Higher Education, 2018; Cuseo, 2019; Drake, 2011; Institute for Higher Education Policy, 2023; Joseph & Poisel, 2018; Metzner, 1989; Wyner et al., 2016), the effects of two-plus-two advising models are still relatively under researched and under explored. We found only two other co-employed or two-plus-two advising

partnerships in the literature, whereby advising caseloads were also cross assigned between partnered institutions. Transfer student outcomes had not been published on either, (Carlsen & Gangeness, 2020; Wetzstein, 2018), underscoring this study's significance.

University Context

The university into which community college students (i.e., both treatment and control groups) transferred is a public, land-grant, four-year, Research 1 (R1) university (i.e., a university with very high research activity), as per the *Carnegie Classifications of Institutions of Higher Education* (Center for Postsecondary Research [CPR], n.d.). In 2020, at the time of this study, this university served 49% White, 29% Hispanic, 5% Asian, 5% foreign national, 4% African American, 1% Native American, and 7% "other" students. Related, it is also a Hispanic Serving Institution (HSI), which, as defined by Title V of the Higher Education Act (U.S. Department of Education, n.d.), must meet undergraduate enrollment population rates of at least 25% Hispanic.

This university also houses a distance education department operating ten learning centers across rural areas throughout the southern half of the state in which the university is located. These learning centers serve transfer students coming from local community colleges throughout the state which are co-located with or near the university or the university's satellite campuses.

The primary goal of these centers is to help students realize affordable, accessible, and regionally relevant four-year degrees that are appropriate to these rural communities in terms of their economic and industrial contexts. These centers are especially important given barriers to Latinx students' successful transfers and persistence such as losses of transfer credit, slower relative progress to degree attainment, informational and cultural barriers, tuition costs and costs of living, and issues with social and/or academic integration (Bensimon & Dowd, 2009; Eggleston & Laanan, 2001; Jackson & Laanan, 2015; Rendón & Valadez, 1993; Wyner et al., 2016).

Transfer shock, initially defined by Hills (1965), captures these and other threats to persistence for underserved students, like those of focus at this university and this study herein. Providing a more seamless transition between institutions through a two-plus-two advising model prioritizes the need for accurate transfer course advising and building TSC. This need was deemed vital before the COVID-19 pandemic, but it was during the COVID-19 pandemic that we were able to more directly examine the two-plus-two program's effects.

Community College Contexts

Treatment group students ($n=23$) attended a community college in a rural town that had a total population, as per the U.S. Census in 2020, of 16,531 residents. This community college was one of the first community colleges in the state. It had an undergraduate enrollment of 3,032 students in 2021–22 and cost \$2,184 for in-state

tuition. It currently offers 49 associate degrees and has traditional residence halls (dorms) that can house up to 180 residents per semester. At the time of this study, the age distribution of the town's population in which this community college was located was 28.2% under the age of 18, 10.4% from 18 to 24, 28.2% from 25 to 44, 21.7% from 45 to 64, and 11.5% who were 65 years of age or older. The median age was 32.2 years. For every 100 females, there were 120.7 males. The racial makeup of the town was 82.6% Latinx, 68.2% White, 2.8% African American, 1.7% Native American, and 0.6% Asian, with racial reports *not* reported as mutually exclusive (i.e., $\sum\% > 100\%$).

Control group students ($n=33$) attended a community college in a rural town that had a total population, as per the U.S. Census in 2020, of 95,548 residents. The community college was also one of the first community colleges in the state. It had an undergraduate enrollment of 7,595 students in 2021–22, and cost \$2,960 for in-state tuition. It now offers over 100 associate degrees and certificates, and it has traditional residence halls (dorms) that can house up to 348 residents per semester. At the time of this study, the age distribution of the town's population in which this community college was located was 29.6% under the age of 18, 11.9% from 18 to 24, 27.1% from 25 to 44, 17.5% from 45 to 64, and 13.9% who were 65 years of age or older. The median age was 31 years. The racial makeup of the town was 68.8% White, 54.8% Latinx, 3.2% African American, 1.2% Asian, and 1.8% Native American, again, with racial reports *not* reported as mutually exclusive (i.e., $\sum\% > 100\%$).

Student demographics for either community college were not available, although we can likely assume that students' demographics matched the town demographics, given that most community college students throughout the U.S. attend community college part-time so that they can also work while attending school (U.S. Department of Education, 2023).

In short, the demographics of the rural towns for both community colleges, from which treatment and control group students transferred into the university, were remarkably similar. However, the rural town from which the treatment group students came was markedly smaller in terms of its total population, and its population consisted of more Latinx in terms of its racial demographics. The community colleges were similar in terms of their tuition costs, and they likely represented their rural towns' demographics. Yet also important to note is that the community college from which control group students came had almost double the enrollment and housing capacity and had many more programmatic offerings than the community college from which treatment group students came. These contextual factors are certainly important to keep in mind, especially as readers critically consume the findings and the extent to which study findings statistically or practically matter.

Advising Model Context

In collaboration with these rural, two-year community colleges and the four-year university, we assigned a single adviser to a set of transfer students from March

2021–March 2022. For treatment group students, there was no change in the adviser or advising processes between institutions. Advisers were co-employed by the community college and university via joint appointments. Advisers were offered support from colleagues, leaders, and other advising personnel at both institutions, and were provided with institutional access to both institutions, such as internal technology and advising systems. Advisers were assigned student caseloads at both institutions based on treatment group students' self-reported intentions to transfer to the same university of interest, ensuring continuous advising.

We also trained these advisers to use Bloom et al. (2008) appreciative advising techniques (i.e., Disarm, Discover, Dream, Design, Deliver, Don't Settle) to ensure that treatment group students' joint advisers were highly equipped, experienced, and able to help students with information from both institutions. This expertise extended across core and other transfer grades and credits, academic offerings and requirements, honors requirements, relevant programming, success in (primarily, at the time, online) courses, financial information, internships and cooperative education experiences, important deadlines, campus life, and campus visits, among many other topics.

While control-group students also self-reported intentions to transfer to the same university, they participated in a more traditional advising model. As they moved from the community college to the university, they were assigned new advisers at each institution, and these advisers had not received training in Bloom et al.'s (2008) appreciative advising techniques and did not systematically receive or use information from the partner institution in their work with students.

METHODS

We employed action research methods to examine our research questions, given that action research is focused on solving problems of practice. In this study, the problem of practice is defined as Latinx students' unsuccessful transfers from community colleges to a university. Action research approaches are also performed by practitioners at the center of such problems, who typically develop and examine multiple solutions to make the challenge less problematic over time (Creamer & Scott, 2000; Mertler, 2017). More specifically, we employed a mixed-methods action research approach (MMAR), collecting and then simultaneously analyzing the quantitative and qualitative data we collected (Ivankova, 2015; Plano Clark & Creswell, 2015).

Research Questions

We examined two research questions (RQs):

1. To what extent did this new advising model impact transfer students' retention from the point of transfer through the first year at the university?

2. How did this new advising model impact transfer students' satisfaction, affect their perceptions of the extent to which they felt supported, and increase their perceived levels of transfer student capital?

We positioned these questions as critical to our collective understanding of the efficacy of this new two-plus-two transfer advising model and its value to both institutions and their underserved, primarily Latinx students. An increased understanding of the impacts of this model also had implications for university and, perhaps, statewide consideration and expansion to other universities in the state also serving similar community college transfer students. Implications for universities beyond state borders are also important.

Sample

The sample consisted of a treatment group of 23 transfer students advised by one academic adviser from their first year at the community college through transfer into the university. We selected a control group of 33 students, with similar demographics, transferring from another community college, with similar institutional demographics, to the same university. These students changed advisers after exiting their community college. We selected both groups conveniently, while selecting both populations as methodically as we could in order to help alleviate potential threats to validity. For example, the *history* whereby different students might have different experiences and receive differential support services during the time of interest in the study, and *nonequivalence* of groups which could be of concern if the groups were unequal in terms of key student variables and characteristics (Smith & Glass, 1987).

Sample Comparability

To determine that the two groups (treatment and control) were similar enough to effectively compare student outcomes and ultimately draw valid inferences, we examined whether members of both groups were similar, or inversely put, *not* statistically significantly different from each other on key factors and variables. We did this by performing chi square comparative analyses of these two groups by examining four student characteristics: Pell grant eligibility (as a measure of socioeconomic status [SES]), cumulative transfer GPA, gender, and ethnicity. Per Bahr et al. (2013), SES, community college GPA, and gender are the most common student characteristics associated with successful baccalaureate degree completion for transfer students. Given Berger and Malaney's (2003) and Smith's (2002) findings that students of color can also experience differential advising satisfaction, we also analyzed ethnicity.

We found that across both groups, students participating in the treatment and control conditions were 63.9% Pell eligible, 58.9% female, 83.9% Latinx, and their average transferring GPA was 3.20. All chi square tables that include breakdowns for our treatment and control groups across these demographic variables are

included in Appendix A (Tables A1-A4). It is important to point out that, in terms of the comparability of these two groups, though, we found transfer GPA, gender, and ethnicity did *not* yield statistically significant differences between the two groups at the $p < 0.05$ level (see Tables A2-A4, respectively). However, the transfer GPA chi square value, $\chi^2(3, N = 56) = 7.39, p = 0.07$, was very close to the $p < 0.05$ level and should be noted, indicating that students in our treatment group had close to significantly higher incoming transfer GPA ($M = 3.36$) than students in our control group ($M = 3.08$). Additionally, there was a significant difference between groups in terms of SES (Pell grant eligibility), $\chi^2(1, N = 56) = 5.70, p = .02$, wherein members of our treatment group were significantly more likely to be Pell eligible or of lower comparative SES (see Table A1).

Put differently, members of our treatment group had a risk factor of lower relative SES, but a protective factor of higher transfer GPA, whereas members of our control group had a risk factor of lower transfer GPA, but a protective factor of higher relative SES. Although opposite each other, since each group had both a risk and a protective factor, for balance, we deemed them as adequate comparison groups for this study, with considerations noted.

Data Collection

We collected archival student enrollment data, student survey responses, and student and adviser interview data. For our archival institutional data, we collected information about students' first-term persistence and first-year retention rates to ascertain both sets of students' success levels.

Our survey data included quantitative (e.g., Likert-type) and qualitative data (e.g., open-ended items), collected to learn more about differences in the attitudes, opinions, and perceptions between our treatment and control group students (Creswell & Guetterman, 2019). We did not collect pre-survey data for students in either our treatment or control group because, due to the study's timing during the COVID-19 pandemic, we lacked permission to administer both a pre- and post-survey to both groups. On all survey occasions, we surveyed all students' self-reported perspectives regarding their satisfaction (i.e., *satisfaction*, as defined by Tinto [1993]), perceptions of the support they received (i.e., *perceptions of support*, as defined by Laanan et al. [2010]), and *TSC* they believed they gained (i.e., *TSC*, as described by Laanan et al. [2010]).

We adapted our instrument from four sources (Harbin, 1997; Lynch, 2004; Schreiner & Juillerat, 2006), all of which had been tested for reliability and validity. We revised the instrument based on feedback we received from multiple rounds of review, and we piloted the instrument with students *not* included in this study. Both efforts we deemed important to support our instruments' capacity to yield valid inferences and accurate findings (American Educational Research Association [AERA] et al., 2014).

Our final instrument contained 30 Likert-scale items situated across our same three constructs (satisfaction, perceptions of the supports received, and *TSC* that

students in both groups believed they gained), given the advising models (either the two-plus-two or traditional model) in which they were engaged during this study.

The survey included 30 Likert-scale items using a six-point scale—Strongly Agree (6) to Strongly Disagree (1)—and five open-ended questions. We included these five open-ended items to solicit and collect students’ written free responses to the questions we asked. See our student survey instrument in Appendix B. The survey questions are mapped to the three constructs in the alignment key in Appendix C. We also tested this instrument for internal consistency reliability, calculating Cronbach alphas ($\alpha > 0.70$) overall and across constructs, with our final alphas illustrated in Table 1. All alphas were greater than $\alpha > 0.70$ and ranged from $0.75 \leq \alpha \leq 0.88$, with alpha overall at $\alpha = .93$.

Table 1
Reliability of Survey Instrument Constructs

Construct	N of items	Cronbach’s Alpha
Satisfaction	8	0.88
Perceptions of Support	10	0.85
Transfer Student Capital (TSC)	12	0.75
All Survey Items	30	0.93

Last, we collected qualitative interview data via semi-structured interviews with 10 of the treatment group students, randomly selected from the 23 total students in this group, and all three of the treatment group advisers advising in the new two-plus-two model. For our treatment group student interviews, we developed a protocol that included eight questions that we mapped onto Bloom et al. (2008) six appreciative advising stages (i.e., from Disarm through Don’t Settle). The interview protocol, with items mapped to the appreciative advising stages, is available in Appendix D.

We did not conduct interviews with students in the control group because prior research was conducted which informed the development and implementation of this new advising model. Students from these and other rural communities expressed needs and desires regarding smoother transitions. Accordingly, we conducted these interviews to form in-depth understandings of *only* the perceived impacts of this advising model on treatment group students who were engaged in this new advising model at the time.

The adviser interview protocol included five questions, also aligned with Bloom et al. (2013) six appreciative advising stages. The adviser interview protocol, with items mapped to these appreciative advising stages, is in Appendix E. We conducted all interviews individually via Zoom, again, because this study was conducted when COVID-19 conditions and institutional mitigation protocols persisted.

Data Analyses

To examine the differences between groups on successful retention through transfer to the university, first-term retention, and first-year retention, we conducted descriptive analyses. We also conducted chi square analyses for our categorical variables and independent samples *t*-tests for our survey-based ordinal data to examine differences between student groups on their advising satisfaction, perceptions of support, and TSC. We did not conduct any more advanced statistical analyses (e.g., using nested models) given our small sample size, in accordance with de Winter (2019), who suggested using *t*-tests for such purposes is “feasible” (p. 1). However, also of consideration are the risks of Type II errors which may compromise the validity of our statistically significant findings. We also used Cohen’s (1988) *d* to indicate practical significance, with $0.0 \leq d \leq 0.2$ indicating no effect, $0.2 \leq d \leq 0.5$ indicating a small effect, $0.5 \leq d \leq 0.8$ indicating a medium effect, $d \geq 0.8$ indicating a large effect, and $d \geq 1.0$ indicating a very large effect, where differences between groups are greater than one standard deviation (Cohen, 1988).

To analyze our qualitative student survey and interview data, we used a grounded theory approach (Charmaz, 2014). More specifically, we engaged in data reduction by reading through our data line-by-line, generating codes, and open-coding our codes using an *in vivo* strategy (Saldaña, 2016; Strauss & Corbin, 1990) to inform if and how students constructed connections between their advising experiences and perceived successes and challenges. See an example of our codes and coding strategy for the open-ended responses from our survey data in Appendix F.

Study Limitations

One primary concern was the small sample size used in this study. However, action research studies permit research on smaller samples and often do not aim for generalizable claims. Accordingly, we do *not* make any claims of generalization but recognize that findings from small-*n* studies, as well as studies with differing conditions and contexts, might “stimulate discussion and dialogue among practitioners” (Stake & Trumbull, 1982, p. 5). As such, we assert our findings are likely *not* generalizable, but they are interesting, suggestive, and warrant further consideration and investigation.

Likewise, we acknowledge that it is certainly possible that there were factors beyond the academic advising model to which treatment group students were exposed that may have impacted these students’ higher retention rates post-transfer, such as students’ senses of community at the treatment group’s community college versus the control group’s community college. These types of factors, because they cannot be easily quantified or, rather, could not be easily quantified at the time of this study, we have to leave as potential threats to the validity of the inferences we and others might draw from our study’s findings, recalling prior notes about such threats to internal validity (Smith & Glass, 1987).

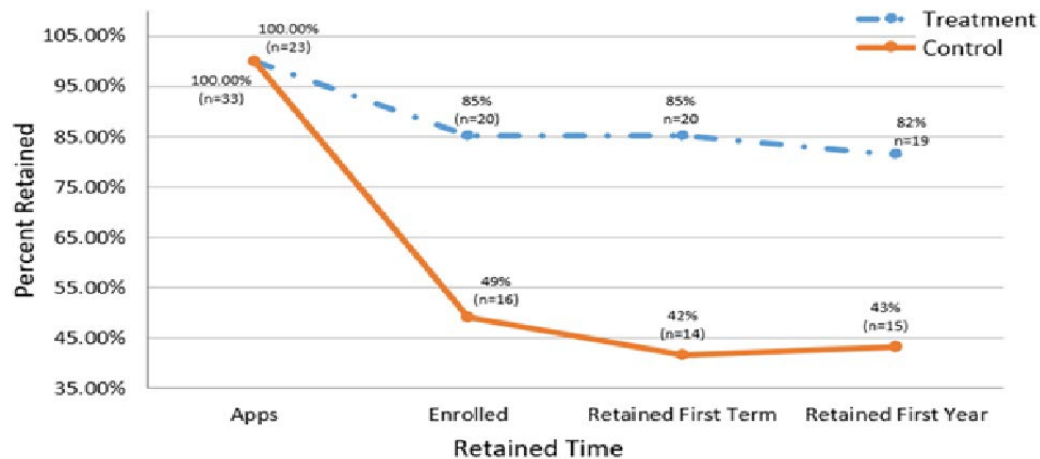
In terms of external validity, it is important to note that, again, given this was an action research study, the goal was *not* to generalize findings from this study but, rather, to form naturalistic generalizations. As described by Stake & Trumbull (1982), naturalistic generalizations empower readers to acquire information and experience-based knowledge from a study's findings and apply what might resonate to their own contexts, and, in this case, professional pedagogies, for enhanced practice. As such, studying two separate community colleges like we did herein, while *not* being able to control or hold constant all variables that may have influenced (or distorted) our findings, should be considered a reasonable limitation to this study and this study's findings.

FINDINGS

Quantitative Findings

Student Retention – Treatment and Control Group Students. For RQ1, we discovered that treatment group students persisted at greater rates. Figure 2 illustrates the differences in treatment and control group students on enrollment retention from the point of university transfer through the first year at the university.

Illustrated in Figure 2 is that the group without the two-plus-two advising intervention demonstrated overall lower retention (43.28% retained after the first-year in the control group, compared to 81.48% retained after the first-year in the treatment group), with the most dramatic loss from application to initial enrollment in the first-term (49.25% retained after the first-term in the control group, compared to 85.19% retained after the first term in the treatment group). As also illustrated, we found an overall higher retention rate (81.48%) from application through the first year of enrollment for the treatment group who received the two-plus-two advising intervention than for the control group who did not (43.28%).

Figure 2*Time Series Graph for Retention by Group (March 2021–March 2022)*

We also conducted chi square analyses at each point in time and found a significant difference at the $p < 0.05$ level at all three points in time between the treatment and the control locations, in terms of students being enrolled in the first-term, $\chi^2(1, N = 94) = 10.32, p < 0.01$, retained after the first-term, $\chi^2(1, N = 94) = 14.60, p < 0.01$, and retained after the first-year, $\chi^2(1, N = 94) = 11.31, p < 0.01$. In other words, the two-plus-two advising model seemed to have had a significant impact on the probability of whether treatment and control group students were retained at each point in time in this study.

Student Post-Survey – Treatment and Control Group Students. For our t -test analyses on our student post-survey results, we performed independent t -tests for each of the three constructs using the summated item data obtained from our two groups of students: treatment and control. We used independent t -tests, accordingly, to determine if differences between the groups for the constructs of academic advising satisfaction, perception of support, and TSC, could be attributed to this two-plus-two advising intervention (see Table 2).

Table 2
Survey Construct Findings with T Test by Group

	Treatment Group <i>n</i> = 23		Control Group <i>n</i> = 33		<i>t</i>	<i>p</i>	<i>d</i>
	Mean	SD	Mean	SD			
Satisfaction	46.78	1.30	41.17	4.12	3.87*	0.001	2.75
Perceptions of Support	58.33	1.12	50.00	4.38	4.56*	0.002	2.86
Transfer Student Capital (TSC)	67.56	3.05	60.83	5.88	2.93*	0.005	4.36

Note. As per Cohen (1988), $0.0 \leq d \leq 0.2$ indicates no effect, $0.2 \leq d \leq 0.5$ indicates a small effect, $0.5 \leq d \leq 0.8$ indicates a medium effect, $d \geq 0.8$ indicates a large effect, and $d \geq 1.0$ indicates a very large effect.

More specifically, on *satisfaction*, treatment group students reported significantly greater levels ($M=46.78$, $SD=1.30$) than control group students ($M=41.17$, $SD=4.12$; $t(54)=3.87$, $p=0.001$). On *perceptions of support*, treatment group students reported significantly greater levels ($M=58.33$, $SD=1.12$) than control group students ($M=50.00$, $SD=4.38$; $t(54)=4.56$, $p=0.002$). On *TSC*, treatment group students reported significantly greater levels ($M=67.56$, $SD=3.05$) than control group students ($M=60.83$, $SD=5.88$; $t(54)=2.93$, $p=0.005$). All effect sizes were greater than 2.0, meaning the difference between the group means was greater than two standard deviations, indicating a very large effect.

Correspondingly, the two-plus-two advising program seemed to have had a significant, large, positive effect on student satisfaction, perception of support, and informational capital. On individual survey items, though, it is worth noting that small to medium effect sizes were seen on those items with a significant difference between groups at the 95% confidence interval.

Qualitative Findings

Student Post-Survey – Treatment and Control Group Students. Using the analytical approach described earlier, we analyzed the open-ended statements of the survey respondents, for treatment group students only, constructing a set of findings capturing their transfer experiences as related to *information transmission*, the *importance of the advising relationship*, and their *transfer advising satisfaction*.

First, treatment group students expressed awareness of the extensive knowledge their advisers could share given the unique *information transmission* roles their treatment advisers played in understanding both their community college and

university institutions. One student wrote that the adviser knew “the game for both community college and university,” and, as another student added, helped them “get a head start at the university level.” In contrast, a control group student distinguished the need to “ask for help from whomever is available” to get the support he needed, and another control group student wrote that they found “everyone had something different” with respect to getting transfer and degree requirements information.

Second, all students surveyed, regardless of treatment or control group, expressed their perceptions of having support from their advisers and the *importance of the advising relationship*; all recognized the value of “just being able to talk to someone.” But treatment group students noted more often and more specifically their perceived advantage in the *information transmission* from their advisers, who helped them “stay on track.”

Finally, like the quantitative survey response findings reported, between the two groups, we also found distinctions in *transfer advising satisfaction* levels, with more treatment group students expressing satisfaction with advising (78%) with their transfer than control group students (67%). A treatment group student, for example, stated their adviser took “a lot of stress off of my shoulders.” Several more treatment group students expressed their perceptions of support, including one who wrote, “I felt well supported by the academic adviser.” However, around half of the students in each group reported unsatisfactory experiences, particularly related to COVID-19 mitigation procedures. From both groups, responses included disappointment in “not being able to meet face-to-face” and “not [being] able to physically attend class and orientation.” The interviews with treatment group students further expand on these themes, as detailed next.

Treatment Group Student and Adviser Interviews. The interview data we collected, again, from seven treatment group students and three two-plus-two advising model advisers, revealed the same three prevalent themes, as aligned with students’ open-ended survey responses just described: *information transmission*, *importance of the advising relationship*, and *transfer advising satisfaction*. Here, however, given that these data were collected through interviews, there are more data to help explicate what each of these themes meant to study participants.

First, in terms of *information transmission*, the treatment group students whom we interviewed all spoke of the importance of learning about college, majors, classes, and processes. Almost all expressed the importance of asking questions about resources and transfer course requirements but noted they did not always do so when they should have. One student recognized, “Sometimes we need people more knowledgeable in whatever area we’re struggling.” Another student noted that once assigned to the adviser, “I had questions that were really specifically answered...so that made me more secure about the way I was transferring.” One adviser confirmed:

Some students didn’t even know that [the university] was there, that the program was there, that there were financial resources for them, that they could get financial aid, and all these different things that they could use as

[university] students. And, when they learn about it, they're like, okay, I'll do it.

Several treatment group students commented on the importance of having a "clear roadmap" for their transfer journey. For some, this roadmap focused on sequencing their community college and university courses; for others, it focused on financial aid and transfer requirements. One student shared the importance they placed on their two-plus-two adviser removing their fears when their adviser "laid it all out clear...and said...this is what you're going to do here, and this is what you need to do." Another said their two-plus-two adviser "would lay it out just in a few steps for me to understand...in easy terms" and helped them "know what the next four years [were] going to look like." Yet another student stated that every semester, "when it was time to enroll in classes, having the adviser...giving me that [transfer] information...was very helpful." The two-plus-two advisers' knowledge about both institutions increased students' informational capital; all the students acknowledged their two-plus-two advisers as being more helpful than other staff and other "more traditional" advisers, with one student specifying, their two-plus-two adviser "gave me the most information about [community college] and [university] requirements." The two-plus-two advisers all expressed the appreciation they felt from their students, as well, with one stating how the treatment group students whom they advised were all "grateful that they had that transfer bridge built for them."

A common experience shared by treatment group students was "transferring where [they] had all the information [they] needed." All three two-plus-two advisers confirmed that an important part of their role was determining students' readiness to transfer to the university. One adviser clearly stated, "I wouldn't encourage students to apply unless I was for sure they were ready to transfer." Another expanded, "You walk them through the whole first two years, and then you tell them when to apply." The third said, "It's a more refined process...I'm able to see their [community college degree] audits" and then tell students, "Let's start applying because you're going to be ready." They described taking the guesswork out of the experience for the students and "walking them through" their two- and four-year educations. One treatment group student also described their important decision to delay their transfer to the university at the advice of their two-plus-two adviser and expressed their gratitude for being advised to transfer at a time when they would have a more substantial scholarship opportunity.

The treatment group students we interviewed also mentioned barriers to their education, including finances, first-generation concerns and fears, and family responsibilities. However, one student noted, "If I ever had a problem or something, [my two-plus-two adviser] was the first person to know and get me set up really quick." One first-generation student in the treatment group noted that their "adviser really influenced [them] in those types of decisions [allowing them to] actually get [their] degree without having to get any type of loans." They likened their adviser to "a mom for a first-generation student," since their own family did not know how to help them through the financial and transfer opportunities. In the interviews, the

advisers did not specifically share their role in providing options to students, but the results of the student interviews pointed to this as an important function of their informational capital and in building trust with their students. One student stipulated their two-plus-two adviser “never tried to convince...or influence [their] decision,” but rather supported them by giving them options of what they could do. Advisers and treatment group students alike recognized the significance of their two-plus-two advisers’ roles in sharing information to help them navigate the two institutions and facilitate successful transfer decisions and processes.

To summarize these information transmission effects, one student said of their integration into the university, “After transferring, I realized how much more prepared I actually was and how much more confident it made me.” The information transmission described in these interviews, accordingly, underlines Laanan et al. (2010) conceptual definition of TSC, with treatment group students’ two-plus-two advisers acting as the cross-institutional agents imparting positive perceptions of transfer, navigating transitions for students, and empowering them with institutional knowledge to aid in their integration (see also Maliszewski Lukszo & Hayes, 2020; Stanton-Salazar, 2011).

Second, in terms of the *importance of the advising relationship*, most of the students and all the treatment advisers we interviewed indicated the importance of their advising relationship on their students’ retention and transfer success. One student recalled that their adviser “said [they] would follow me through [the university] and [they] helped me and prepared me.” Likewise, one of the advisers stated:

[For treatment group] students, support is a huge thing for them. Feeling supported, feeling that they belong to the campus, that they’re not just a number, that people are there for them, that they care, that people are there to support them...It makes a difference.

A student described their relationship with their adviser as deeper than those with other personnel, stating the adviser “was always there for us, more like a friend.” Another student said they recognized the adviser was looking out for them by sending them information and regular encouragement to help them stay on track. Several students mentioned the advisers being more approachable than others, increasing their levels of comfort, building rapport, and helping make going to the university feel easier.

Beyond the support provided, the advisers reported recognizing that the two-plus-two advising model provided students with consistency across institutions, that students “built that relationship and trust” with their adviser at the community college, and that “students know that [their advisers were] a constant” at the university. One of the advisers referenced the two-plus-two advising model as a real-world example of the concept of looping in education, where teachers move through at least two grade levels with the same students (see, for example, Grant et al., 1996; Guadiz, 2015). They noted that their students saw their two-plus-two advisers as “key people who are a constant in [students’] lives, which has a calming

effect.” Another adviser reiterated this, underscoring that students “need that bridge in between that’s going to be constant.”

With respect to retaining students through the transfer pathway at both institutions, one of the advisers stated that “even if [students are] thinking of leaving, they have that relationship with you, and then I guess they feel that they have to stay because you support them.” Another adviser said students feel the “weight of somebody there that’s keeping [them] accountable.” One student confirmed the importance of the advising relationship on their retention when they said, “They kind of kept me going in a lot of ways.”

Related to their larger academic and career goals, a few students stated that they had not planned to transfer until after they first spoke to their two-plus-two adviser, and after working with their adviser they elevated their goals from completing an associate’s degree to continuing through the transfer process to complete a bachelor’s degree. One student stated, “I didn’t think about transfer right away,” and another planned to “get an associate’s and then start working.” One student identified that once they were settled in at the community college and assigned to their adviser, they became “comfortable, confident, and ready to keep moving forward.” One of the advisers confirmed that some of the students “would never have had that conversation with anybody [and] they would have just stayed with an associate[’s] degree” if they did not have a relationship with their transfer adviser. In fact, most of the students recalled when they were assigned to their advisers, expressing how that changed their transfer path. As one student added, “Ever since then it’s just been a great experience.” Another underscored this by noting that “without [their adviser’s] support, I think I wouldn’t have applied or anything cuz it looked like a scary process.”

Advisers and students alike articulated the importance of the relationships between students and advisers at various points in the student journey, including major selection and decisions to continue to enroll or pursue transfer. Their advisers were “the key” to their transfer and eventual success. The sense of someone looking out for them and being a constant source of support appears to have increased student integration with both institutions and their commitment to their goals. For transfer students, specifically, as also noted in previous research, developing integration can be challenging because of the transitional nature of the systems and relationships (see, for example, Afzal et al., 2024; Bowles et al., 2024; DeLaRosby, 2017; Pascarella et al., 1986); however, these interview responses indicate recognition of successful relationship building with treatment group students and their treatment group advisers as constant sources of integration and support for students during their transfer journeys.

Finally, in terms of *transfer advising satisfaction*, every student we interviewed expressed their satisfaction with the new two-plus-two transfer process. More specifically, four students ($n=4/7$; 57%) indicated they had a “smooth transition” to the university, five ($n=5/7$; 71%) students stated that their transfer was a “great experience,” and one ($n=1/7$; 14%) used the word, “streamlined.” One student added that they anticipated it could have been harder when they said, “it wasn’t

very difficult, as I would think it would be in other places.” The treatment group advisers also described the student transfer experience as “seamless” and “refined” and explained that students can now “go to [the university] knowing that they’re going to have that [same] adviser [with whom] they already have built that trust and that communication and have seen like what their pathway will look like.” One student more specifically said:

I didn’t feel the transfer process at all. I just trusted that everything was going to be set for [the university] and everything that I took at [my community college], because it was already a pathway. I was good to go, and I was able to have everything I needed.

One adviser used a Bible verse to describe the small challenges that students face in achieving their educational and transfer goals. She told us that “small foxes spoil the vine,” explaining that during students’ journeys many small barriers can add up to spoil the whole transfer experience. On the adviser role, they said, “We’re putting out traps for the small foxes.” Here, they described a somewhat regular occasion where they requested transcript fee waivers for students when they “didn’t even know that’s something we did.” But their actions eliminated a payment barrier (or a small fox) for the students.

In sum, students consistently cited successfully transferring to the university, persisting in enrollment, building supportive relationships, completing degree milestones, and achieving their career outcomes as reasons they were satisfied with this new two-plus-two advising model. However, while all the students noted the smooth transfer transition they experienced between institutions, the advisers we interviewed did note some concerns about their roles throughout students’ transfer advising experiences.

As an employee of both institutions, one of the advisers expressed that “it sometimes feels like I belong nowhere” and described themselves as “in the middle” and the self-proclaimed “bridge” between the institutions while not really belonging at either. In reference to their coworkers at both institutions, two advisers mentioned the lack of understanding and acknowledgement of their work by their more traditional advising peers, with one saying, “I do all of this, but [they] don’t see it.” All three advisers mentioned the challenges that came along with their joint adviser positions, how hard and sometimes overwhelming it was to work in “two different worlds” and how important buy-in and support from both institutions was to their delivery of quality advising to students. They all also recognized that their adviser role bore additional responsibilities, in terms of advanced advising knowledge and increased workloads, all while still reporting on the positive results of their positions. Put differently, they acknowledged the tax of the extra loads they carried, especially as compared to other advisers at both institutions, but they thought their work in support of these students was worth it.

Overall, students’ satisfaction with their two-plus-two adviser experience, as well as with their individual advisers, was evident in the overwhelmingly positive responses. All advisers also noted students’ gratitude and satisfaction with this new

advising model. Given the risk factors of the treatment group population potentially preventing educational attainment, as also evidenced in prior literature (see Fink & Jenkins, 2017; Wyner et al., 2016), the importance of students' expressions of satisfaction with their transfer advising experience cannot be understated in the students' decisions to retain through the transfer pathway (see also Creamer & Scott, 2000; Standish, 2017; van Berkel et al., 2023).

DISCUSSION WITH IMPLICATIONS

The reportedly higher levels of transfer student advising satisfaction that we observed via our findings serve as one indicator of program efficacy and success. However, while it is ideal that students have positive transfer experiences, student satisfaction is often overused and discouraged as it is not, in and of itself, typically enough to assess the value of any such model, especially given self-reported satisfaction levels do not often account for long-term outcomes (Creamer & Scott, 2000; Standish, 2017; van Berkel et al., 2023). On this, and especially for this two-plus-two advising program, we need more studies to use students' prior levels of satisfaction to predict and then verify students' later and long-term outcomes (which was beyond the scope of this study, also given this study's sample size).

Yet, Tinto's (1993) model of student departure and findings from related studies (Tinto, 2017, 2022, 2023) have, in short, evidenced how students' positive experiences are, perhaps, most important in promoting their academic integration, commitment to completion of their goals, and retention and persistence (see also Fincham et al., 2021; Levin & Levin, 1991; Liu & Liu, 2000; Schreiber et al., 2014; Stewart et al., 2015). Correspondingly, the significantly higher transfer satisfaction we observed for treatment group students is an important marker of the value of this new two-plus-two transfer advising model, but this finding should still be combined with further findings, for example, on graduation rates, as also related to TSC.

In terms of students' senses that they had gained more TSC when compared to control group students, it is important to note that research on transfer student experiences suggests how articulation agreements and transfer credit tools also continue to improve transfer processes (Berger & Malaney, 2003; Hodara et al., 2017; Townsend & Wilson, 2006; Worsham et al., 2021). However, while the informational contexts simultaneously supporting TSC are improving, other key capital components leading to successful transfer (e.g., meaningful relationships) possibly matter more. We found that in addition to this new advising model reportedly providing students more TSC, students and advisers reported this advising model helping them also resolve these and other informational and procedural barriers, as also noted elsewhere (Anderson, 2020; Barber et al., 2021; D'Amico et al., 2022; Jackson & Laanan, 2015; Swecker et al., 2013; Walsh et al., 2021).

Support and information provided by treatment group students' advisers were mentioned as instrumental in treatment group students' decisions to transfer suggests the adviser position built into this two-plus-two model fostered positive,

intentional, collaborative, and proactive practices that helped students optimize their educational experiences (Bloom et al., 2013). Bloom et al.'s (2008) framework also suggests students' long-term advising relationships will continue to contribute to students' sustained commitments to and advancements of their goals, especially important given this study's rural context and traditionally underserved set of students.

Similarly, the timing of this study which occurred during the COVID-19 pandemic, highlighted the fact that the pandemic introduced unexpected conditions and variables to this study, including, for example, increased barriers to access and broader declines in higher education enrollment, especially for underserved students and students in rural areas with less internet access and fewer financial means, medical and social services, and other resources (Anderson, 2020; Barber et al., 2021; D'Amico et al., 2022; Dhupelia, 2023; Walsh et al., 2021). While we could not address this myriad of inequities in this study, we could examine whether the additional student support offered via this new transfer advising model worked to help offset some of the larger barriers delimiting such students' transfer experiences.

Apparently, the model did offset some barriers, although, given the COVID-19 pandemic, students in the study (both the treatment and control group students) transferred into the university of interest and went through the transfer application processes, their orientations, and their student advising experiences all virtually, which was not akin to the experiences of other cohorts of students. As noted, this could limit the extensibility or generalizability of study findings to other cohorts. On the flipside, it should also be noted that post-pandemic, many of these virtual processes and experiences were retained, possibly supporting the extensibility and generalizability of our findings for student cohorts beyond 2020.

Additionally, research released post COVID-19 has similarly suggested that, while before the pandemic many particularly underrepresented students transferring from two- to four-year colleges struggled to manage the complexities of the transferring process, many of those engaged with "upward transfers...[also] weathered the effects of the pandemic" (Huie et al., 2021, p. 2; see also D'Amico et al., 2022). Treatment group students also seemed to have weathered the storm or, rather, weathered the storm more effectively, especially as compared to their control group peers. This outcome likely reflected increased—and, in this case, successful—efforts to streamline these students' transfer processes, reducing such inequities in these students' access to bachelor's degrees. While not all student groups have been able to leverage such opportunities, and students who engaged in more traditional transfers during the pandemic likely experienced greater academic challenges, navigational hurdles, and diminished access to social capital (Thiry et al., 2023; see also Cepeda et al., 2021; Dhupelia, 2023), in this study, Latinx students successfully leveraged their new transfer opportunities as provided.

As such, implications for academic advisers are important to discuss, especially given that those advising in this new transfer advising model faced challenges not anticipated. Providing more support for such advisers is clearly needed (see also

Cepeda et al., 2021), especially in terms of these advisers' reportedly amplified workloads that also required of them greater levels of knowledge and practice. That advisers carried the weight of helping treatment group students successfully transfer was clear, and this would likely be true for other such models (see also D'Amico et al., 2022). Hence, this might be the greatest implication of this study, which also points to noteworthy financial and human resource considerations.

That we observed that these advisers also provided treatment group students with greater TSC is important to underscore. Such models may simply be worth such investments, especially in terms of the human resources needed, given, as evidenced, that transfer students' advisers were reportedly the key variables who better supported the conveyed successes of this model.

CONCLUSIONS

We developed this new, two-plus-two transfer advising model to improve underserved transfer (i.e., primarily Latinx) student advising supports and practices in the rural areas in which this study took place and to promote positive changes in students' educational outcomes. Participating students transferred into the university at higher rates in comparison to their peers working with advisers in a more traditional model (RQ1), and they were more satisfied with their transfer advising experiences, felt they were better supported, and increased their levels of TSC (RQ2).

These findings were important for students in this study and setting. These findings also likely have implications for other similar students, advisers, and higher education leaders contemplating ways by which they might also augment such positive transfer indicators and better support similar transfer populations, in order to increase such students' social and academic aspirations, which, integrated with students' goals and commitments, are key elements that influence students' decisions to persist (Tinto, 1993, 2017, 2022, 2023; see also D'Amico et al., 2022; Huie et al., 2021; Liu & Liu, 2000; Pascarella et al., 1986; Thiry et al., 2023).

Given these findings, we believe it is higher educators' collective duty to continue to initiate, implement, and evaluate programs like the two-plus-two transfer advising model developed and examined herein, with a mindset toward increasing equitable conditions for all students, and especially those who are underserved. Despite our study's noted limitations (e.g., our sample size, lack of generalizability, potential threats to internal validity), the positive outcomes we observed lead us to conclude that this transfer advising model is worthy of further pursuit and examination, here and perhaps elsewhere, to better attend to and address inequities and disparities in transfer students' successful transfers.

Finally, we could not conclude this study without recalling that this study took place during the COVID-19 pandemic, which introduced new and unexpected conditions and variables to this study such as challenges with online learning, housing insecurities, and increased anxieties and fears. Watching the pandemic exacerbate access and barrier disparities for all our underserved students living in rural communities during this study made for some of the toughest years when

helping to build and implement this model. Given the successes we realized, especially given these contextual challenges, we feel that, at a minimum, this new transfer advising model helped, and that it will help more underserved transfer students in the future to better navigate the uncertain and unsteady processes of moving from a community college to a four-year research institution. As such, our study also substantively adds to the literature surrounding effective interventions that support successful college transfer outcomes for diverse and particularly Latinx students.

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APPENDIX A

Table A1

Survey Respondents Pell Eligibility Disaggregated by Group

Group	Not Pell Eligible	Pell Eligible	Total
Treatment	22.2% (N=2)	77.8% (N=7)	100.0% (N=9)
Control	16.7% (N=1)	83.3% (N=5)	100.0% (N=6)
Total	20.0% (N=3)	80.0% (N=12)	100.0% (N=15)

$\chi^2(1, N = 15) = 0.07, p = 0.79$

Table A2

Survey Respondents Cumulative Transfer GPA Disaggregated by Group

Group	2.00-2.49	2.50-2.99	3.00-3.49	3.50-4.00	Total
Treatment	0.0% (N=0)	22.2% (N=2)	33.3% (N=3)	44.4% (N=4)	100.0% (N=9)
Control	0.0% (N=0)	16.7% (N=1)	50.0% (N=3)	33.3% (N=2)	100.0% (N=6)
Total	0.0% (N=0)	20.0% (N=3)	40.0% (N=6)	40.0% (N=6)	100.0% (N=15)

$\chi^2(2, N = 15) = 0.42, p = 0.81$

Table A3

Survey Respondents Gender Disaggregated by Group

Group	Female	Male	Total
Treatment	55.6%	44.4%	100.0%

	(N=5)	(N=4)	(N=9)
Control	66.7%	33.3%	100.0%
	(N=4)	(N=2)	(N=6)
Total	60.0%	40.0%	100.0%
	(N=9)	(N=6)	(N=15)
$\chi^2(1, N = 15) = 0.19, p = 0.67$			

Table A4

Survey Respondents Ethnicity Disaggregated by Group

Group	White	Hispanic	Asian	Not Reported	Total
Treatment	0.0%	100.0%	0.0%	0.0%	100.0%
	(N=0)	(N=9)	(N=0)	(N=0)	(N=9)
Control	0.0%	100.0%	0.0%	0.0%	100.0%
	(N=0)	(N=6)	(N=0)	(N=0)	(N=6)
Total	0.0%	100.0%	0.0%	0.0%	100.0%
	(N=0)	(N=15)	(N=0)	(N=0)	(N=15)
$\chi^2(1, N = 15) = n/a \text{ Constant}$					

APPENDIX B: SURVEY INSTRUMENT

This survey instrument has two sections. Each section will appear on a new page and the survey bar at the top will display your progress through the survey. Each section contains a mix of Likert-type questions and open-ended questions. Participating in this survey should take you about 20 minutes to complete.

In this section are a series of items about your experience preparing to transfer to the university.

Please use this scale to rate your level of agreement or disagreement with the following statements.

Strongly Agree (6)	Agree (5)	Somewhat Agree (4)	Somewhat Disagree (3)	Disagree (2)	Strongly Disagree (1)
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1. The community college advising I received prepared me well for success at the university
2. Accurate information about transferring to a four-year institution or university was readily available to me at my community college
3. I started planning my transfer to a four-year college or university during my first year of attendance at my community college
4. My academic adviser at my community college was informative about the requirements for transfer to the university
5. I am satisfied with the academic advising experience I had attending my community college
6. I regularly consulted my adviser at the community college
7. I completed all of my lower division (100-200 level) requirements at the community college before transferring to the university
8. Attending my community college first was beneficial for my academic success
9. I am satisfied with the experience I had transferring to the university
10. I felt supported in my transfer to the university
11. I was prepared to transfer to the university

Open-Ended

12. What advice would you give to another student planning to transfer?
13. If you had to do it over again, what, if anything, would you do different?

In this section are a series of items about your experience with academic advising as a transfer student. Think about the academic advising you received regarding your transfer to the university and upon your initial transfer to the university. If you were advised by more than one academic adviser, answer these questions while reflecting on the transfer advising experience with the adviser with whom you had the most interactions during your transfer to the university.

Please use this scale to rate your level of agreement or disagreement with the following statements.

Strongly Agree (6)	Agree (5)	Somewhat Agree (4)	Somewhat Disagree (3)	Disagree (2)	Strongly Disagree (1)
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14. My academic adviser was approachable
15. My adviser cared about me and my goals
16. I received the help I needed to apply my academic major to my career goals
17. My academic adviser helped me identify resources to finance my education
18. I regularly consulted my adviser
19. I trusted my academic adviser
20. My adviser helped me make decisions about my long-term academic and career plans
21. If I had a problem (financial aid, study skills, emotional/physical health, etc.), my adviser would help me or know where to send me to get help
22. My adviser had good knowledge of university and college policies and procedures or knew where to find them
23. It was worth my time to meet regularly with my adviser
24. I would recommend my adviser to a friend
25. If my adviser did not know the answer to a question, they would connect me to someone who did
26. My adviser listened to what I had to say
27. My adviser was knowledgeable about program or graduation requirements
28. My adviser and I worked together as a team
29. The transfer advising I received helped me be a successful university student
30. Academic advising appointments were positive experiences
31. My transfer advising experience met my expectations
32. Overall, I am satisfied with the academic advising support I had as a university transfer student

Open-Ended

33. What kinds of supports do you feel helped you be successful in your transfer to the university?
34. What advising improvements would have helped you feel more supported in your transfer experience?
35. In what ways, if any, did the COVID-19 pandemic affect your transfer experience?

APPENDIX C: SURVEY ALIGNMENT KEY

Satisfaction

Positive institutional experiences and interactions increase satisfaction (Model of Student Departure – Tinto)

5. I am satisfied with the academic advising experience I had attending my community college
8. Attending my community college first was beneficial for my academic success
9. I am satisfied with the experience I had transferring to the university
23. It was worth my time to meet regularly with my adviser
24. I would recommend my adviser to a friend
30. Academic advising appointments were positive experiences
31. My transfer advising experience met my expectations
32. Overall, I am satisfied with the academic advising support I had as a university transfer student

Perceptions of Support

Institutional agents enforce positive perceptions of support (Transfer Student Capital – Laanan)

6. I regularly consulted my adviser at the community college
10. I felt supported in my transfer to the university
14. My academic adviser was approachable
15. My adviser cared about me and my goals
16. I received the help I need to apply my academic major to my career goals
18. I regularly consulted my adviser
19. I trusted my academic adviser
20. My adviser helped me make decisions about my long-term academic and career plans
26. My adviser listened to what I had to say
28. My adviser and I worked together as a team

Transfer Student Capital (TSC)

Institutional agents impart informational capital (Transfer Student Capital – Laanan)

1. My community college advising prepared me well for success at the university
2. Accurate information about transferring to a four-year institution or university was readily available to me at my community college

3. I started planning my transfer to a four-year college or university during my first year of attendance at my community college
4. My academic adviser at my community college was informative about the requirements for transfer to the university
7. I completed all of my lower division (100-200 level) requirements at the community college before transferring to the university
11. I was prepared to transfer to the university
17. My academic adviser helped me identify resources to finance my education

APPENDIX D: STUDENT INTERVIEW PROTOCOL

Introduction

This advising program is the innovation of interest in this study. Your participation in this study is voluntary. If you choose not to participate or withdraw from the study at any time, there will be no penalty. There are no foreseeable risks or discomforts to your participation. Your responses will be confidential. Findings from this study may be used in reports, presentations, or publications but your name will not be used.

The benefit to participation is the opportunity for you to reflect on and think more about transfer student success, and your success as a transfer student.

Interview responses will also inform future improvements to our advising services, thus, there is potential to enhance the transfer experiences of other students besides you.

Verbal Consent

Semi-Structured Interview Questions

1. Tell me about your experience as a student, starting at your community college and transferring to the university. [Disarm, Bloom et al., 2008]
2. How did the COVID-19 pandemic affect your transfer plans or experience? [Discover, Bloom et al., 2008]
3. Was it your intent to transfer to a four-year university when you started at the community college? If No, when did you make the decision? What prompted you to transfer? [Dream, Bloom et al., 2008]
4. What does it mean to you to be a successful transfer student? [Discover, Bloom et al., 2008]
5. What supports do you think are important for a transfer student to have from their adviser? [Design, Bloom et al., 2008]
6. What advice would you give students planning to transfer to the university? [Deliver, Don't Settle, Bloom et al., 2008]
7. What adjustments should be made to transfer advising to improve the student experience? [Deliver, Don't Settle, Bloom et al., 2008]
8. Is there anything else you would like to add about your experiences as a student experiencing this advising model? [Don't Settle, Bloom et al., 2008]

Conclusion/Thank You

APPENDIX E: ADVISER INTERVIEW PROTOCOL

Introduction

This advising program is the innovation of interest in this study. Your participation in this study is voluntary. If you choose not to participate or withdraw from the study at any time, there will be no penalty. There are no foreseeable risks or discomforts to your participation. Your responses will be confidential. Findings from this study may be used in reports, presentations, or publications but your name will not be used.

The benefit to participation is the opportunity for you to reflect on and think more about transfer student success, and your success as a transfer student.

Interview responses will also inform future improvements to our advising services, thus, there is potential to enhance the transfer experiences of other students besides you.

Verbal Consent

Summary

Provide summary of findings from student survey, success data, and student interviews.

Semi-Structured Interview Questions

1. Drawing on your experience, do these findings sound correct? [Disarm, Discover, Bloom et al., 2008]
2. What effects do you think the COVID-19 pandemic may have had on these findings? [Discover, Bloom et al., 2008]
3. Drawing on your experience, is there anything that appears to be missing in these findings? [Discover, Dream, Bloom et al., 2008]
4. Why do you think we found these findings? [Discover, Bloom et al., 2008]
5. What adjustments should be made to the advising model to improve the student experience? [Dream, Design, Deliver, Bloom et al., 2008]
6. Is there anything else you would like to add about your experiences as an adviser working with this advising model? [Don't Settle, Bloom et al., 2008]

Conclusion/Thank You

APPENDIX F: CODING EXAMPLE FOR STUDENTS' SURVEY-BASED OPEN-ENDED RESPONSES

Category	Dramaturgical Code	In Vivo Code
Informational	Objectives	Stay Financially Afloat Knew What I Needed Stay on Track
	Subtexts	Know Both Institutions
	Tactics	Ask Questions Be Prepared Start Early
Relational	Conflicts	Hard to Communicate Not Able to Meet Face-to-Face Huge Adjustment
	Emotions	Lots of Support Good Relationship Talk to Someone
	Subtexts Tactics	Not Changing Communicating
Satisfaction	Attitudes	Didn't Like That Wouldn't Do Anything Different
	Conflicts	No Major Complications I Had Trouble With Somewhat Challenging
	Emotions	More Confident Never Felt Lost

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