Advancing Student Success in Psychology: Examining Academic and Post-Graduate Outcomes of the Psychology Transfer Learning Community and Careers Course

Data Champions Project

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Background

This project evaluates two student success initiatives in the Psychology Department designed to address the academic and career development challenges faced by students. Research has documented that transfer students, especially those from community colleges, experience "transfer shock," reduced engagement, and have fewer opportunities for faculty connection or career preparation (Diaz, 1992; Jacobson et al., 2017; Ishitani & McKitrick, 2010; McGuire & Belcheir, 2013; Scott et al., 2017, Terris, 2009). Transfer learning community programs have emerged as a promising approach to address these challenges by fostering connection, support, and academic momentum.

At the same time, undergraduate psychology majors face another set of barriers. The degree offers a broad range of skills, but does not point to a single career path, leaving many students uncertain about post-graduation plans (Landrum & McCarthy, 2018). Evidence suggests that career-based courses improve students' knowledge of career options, vocational identity, and readiness for employment or graduate study, while also supporting higher retention and graduation rates (Folsom & Reardon, 2003; Pfund et al., 2020; Reardon et al., 2015).

In response, the Psychology department launched the Psychology Transfer Learning Community (TLC) and the PSY 490/PSY411 Navigating Careers in Psychology course in 2020. The Psychology TLC is designed to ease students' transition to CI by fostering a sense of belonging and providing structured support. Students in the TLC are pre-registered for cohort-based courses, complete critical coursework early on, attend monthly group meetings as well as individual advising sessions with faculty, and are placed in a research or internship experience in their second semester. The same year, the Careers course (CC) was first introduced to teach the diverse educational and career pathways in psychology, along with professional development skills, such as preparing graduate school and job applications, and practicing interviewing skills. Over the past 5 years, psychology faculty and advisors have heard compelling anecdotal accounts from students about the personal and professional impact of these initiatives, however, this project made it possible to quantitatively examine whether participation translates into stronger academic and post-graduate outcomes.

Methods

This project analyzed three types of data: (1) sociodemographic characteristics, including student age, gender, race/ethnicity, parent education level, and Pell eligibility status; (2) academic outcomes, such as GPA, retention and graduation status, and participation in high-impact practices; and (3) post-graduate outcomes, including graduate school and career placement from the Graduating Student Survey (GSS), along with career readiness competencies from the National Association of Colleges and Employers (NACE).

Given the distinct goals of each initiative, the TLC analyses focused on academic and post-graduate outcomes, while the CC analyses focused primarily on post-graduate outcomes. To assess the impact of these initiatives, initial analyses compared students from these initiatives to students in matched comparison groups. For the TLC, comparison students were transfer psychology majors propensity-score matched by first-generation status, transfer GPA, and cohort year using the MatchIt R package (Ho et al., 2011). For the CC, comparison students were propensity-score matched by degree year, GPA at the time of graduation, and transfer student status. These initial analyses incorporated all available data at the time of analysis, meaning some post-graduate outcomes could only be assessed for a smaller subset of students who had already graduated.

Participants

TLC participants included 84 students enrolled in one of the five TLC cohorts. Students ranged from 19 to 52 years old (M = 24.54, SD = 6.46; 73% female, 27% male, 1% nonbinary). In terms of race/ethnicity, 45% identified as Hispanic or Latino, 24% White, 13% two or more races or ethnicities, 7% Black or African American, 6% Native Hawaiian or other Pacific Islander, 1% American Indian or Alaska Native, and 2% unknown. Just over half were Pell Grant eligible (57%), while 43% were not. Regarding parents' education, 41% reported a parent with a four-year degree, 33% high school or less, 24% some college or an associate degree, and 2% unknown. TLC participants did not differ significantly from the comparison group on age, gender, race/ethnicity, or Pell eligibility, suggesting they were a strong representation of Psychology transfer students at CI.

CC participants included 225 students who took the Navigating Careers in Psychology class, including the 84 TLC students described above. Participants ranged from 18 to 57 years (M = 25.91, SD = 6.31; 80% female, 20% male). In terms of race/ethnicity, 48% identified as Hispanic or Latino, 30% White, 10% two or more races/ethnicities, 6% Asian, 3% Black or African American, 1% American Indian or Alaska Native, less than 1% Native Hawaiian or other Pacific Islander, and 2% unknown. Nearly half were Pell Grant eligible (48%), while 52% were not. Regarding parents' education, 38% reported a parent with a four-year degree, 34% high school or less, 24% some college or an associate degree, and 3% unknown. CC participants did not differ significantly from the comparison group on age, gender, race/ethnicity, Pell eligibility, or parent education, indicating they were representative of Psychology students at CI.

Results for Psychology Transfer Learning Community (TLC)

The first set of analyses compared students from the Psychology Transfer Learning Community (TLC) to the matched comparison group. Results showed that TLC participants were significantly **more likely to be involved with faculty research** (65%) compared to non-TLC participants (24%), $\chi^2(1) = 10.35$, p = .001, $\varphi = .40$. They were also **more likely to have an internship** at CI (38%) than non-TLC participants (12%), $\chi^2(1) = 5.00$, Fisher's exact p = .04, $\varphi = .28$. Student organization leadership was also marginally higher among TLC participants (15%) compared to non-TLC participants (0%), $\chi^2(1) = 4.13$, Fisher's exact p = .07, $\varphi = .25$. TLC participants also had **significantly higher GPAs** (M = 3.47) at the end of their first year than non-TLC students (M = 3.15), t(138.57) = 3.14, p = .002, d = 0.40, though this difference was not longer significant by graduation (Ms = 3.45 vs 3.36, t[103] = 1.09, p = .28). **Fall-to-fall retention was marginally higher** among TLC participants (96%) than no n-TLC participants (89%), $\chi^2(1) = 3.31$, Fisher's exact p = .08, $\varphi = .14$. Additionally, TLC participants were more likely to have already **graduated** (71%) compared to their non-TLC counterparts (56%), $\chi^2(1) = 4.35$, p = .04, $\varphi = .16$, and **more likely to graduate within 4 terms** (63%) compared to non-TLC participants (38%), $\chi^2(1) = 10.74$, p = .001, $\varphi = .26$.

In terms of postgraduate outcomes, TLC participants (M = 3.41) scored **higher on the NACE Professionalism Competency** compared to non-TLC students (M = 3.00), t(57) = 2.05, p = .046, d = 0.55. Although not statistically significant, TLC students also scored higher on the remaining 7 NACE Career Readiness Competencies, as well as the overall score. In particular, the TLC showed a small positive effect for 4 competencies (Teamwork, Oral and Written Communication, Leadership, Global Fluency), as well as the overall score. Additionally, TLC participants were **more than twice as likely to report applying or planning to apply to graduate school** (63%) compared to non-TLC participants (28%), χ^2 (1) = 7.79, p = .005, φ = .34. To date, a marginally greater proportion of TLC participants (24%) than non-TLC participants (13%) have **enrolled in postgraduate programs**, χ^2 (1) = 3.20, p = .07, φ = .14.

Three of the TLC participants (7%) had already completed a postgraduate program, compared to none of the non-TLC participants.

Results for Careers Course (CC)

A second set of analyses compared students from the Careers Course (CC) to the matched group of students who had not taken the course. Findings showed that CC students were **more likely to have participated in faculty research** at CI (49%) than non-CC students (26%), $\chi^2(1) = 13.18$, p < .001, $\varphi = .24$. They were also more likely to have **completed an internship** (21%) than non-CC students (8%), $\chi^2(1) = 8.49$, p = .004, $\varphi = .19$. CC students also had a **higher rate of post-graduate enrollment** (23%) than non-CC students (14%), $\chi^2(1) = 5.86$, p = .02, $\varphi = .11$. Finally, CC students trended higher on the Teamwork and Collaboration career readiness competency, but did not differ significantly from non-CC students on other NACE career readiness competencies (all ps > .05).

Discussion

Findings indicate that students who participated in the Psychology TLC and CC experienced a range of meaningful academic and post-graduate benefits. TLC students were significantly more likely to engage in faculty research and internships at CI, demonstrated higher GPAs after their first-year at CI, and achieved stronger rates of retention and on-time graduation. Among TLC cohorts who have already graduated, participants were also more likely to report plans for graduate school. These findings are especially meaningful given that incoming GPA was controlled for through the selection of a matched comparison group. Similarly, students in the Careers course showed academic and post-graduate advantages even after controlling for GPA at the time of graduation. In particular, CC students reported greater involvement in faculty research and internships at CI, as well as higher rates of post-graduate enrollment. Overall, these results provide quantitative evidence that reinforces the impactful anecdotal accounts students have shared, underscoring the significant impact of these initiatives on student success.

Despite the overall pattern of positive findings, these results also reveal opportunities for further strengthening these initiatives. For example, TLC participants did not show a GPA advantage by the time of graduation, suggesting that the program's impact may taper during the senior year. The current program supports only incoming transfer students during their first year at CI, so this finding highlights the potential value of extending program elements into their senior year. Similarly, Careers course students did not show significant advantages on the NACE career readiness competencies. These findings point to actionable areas for improvement, underscoring the importance of continued support and refinement.

While this project utilized a matched comparison group, it is important to note that the lack of random assignment limits the ability to draw causal conclusions. It is possible that students who choose to participate in the TLC and CC differ from their peers in meaningful ways (e.g., greater motivation, more awareness of the need for support), which may contribute to the observed outcomes. That said, a key methodological strength of this study is the use of matched comparison groups, which controlled for GPA and other important indicators, thereby strengthening the validity of the findings. In addition, initial analyses relied on basic descriptive and inferential statistics across groups, which likely provide conservative estimates of program impact compared to more advanced matched-subjects approaches.

As additional cohorts complete their degrees, continued analysis will be critical to further evaluating the long-term impact of these initiatives, including on postgraduate employment outcomes. Based on the promising results to date, it is recommended that the Psychology Department continue and expand student participation in these programs. With accumulating evidence, there may also be opportunities to scale these initiatives to other departments within CI, and potentially to other CSU campuses, amplifying their impact across the system.