



# An Examination of Well-Being and Retention during the Transition of Learning Modality in a University Academic Department

## ABSTRACT

The COVID-19 pandemic had an immediate impact and a long-lasting toll on the well-being of students and faculty, influencing their performance and affecting retention rates on college campuses. This study focused on the entire academic department, rather than an individual faculty member or peer, as the department serves as the immediate learning environment, potentially fostering diversity, equity, belonging, and inclusion (DEBI). The department is an academic home where students experience autonomy, relatedness, and competence. A total of 93 department members participated in a survey that elicited their perspectives and experiences related to retention, DEBI, and basic psychological needs during the first semester transitioning back from remote to in-person learning within the pandemic context. Results revealed that while the department is inclusive, there is room for improvement. Although many students and faculty/staff reported struggling during the transition, few expressed a decision to take a break from school/work. Students who were motivated to stay in school scored higher on departmental DEBI climate and basic psychological needs than those considering a break. Implications for department- and university-level policies and programs are discussed, focusing on addressing the well-being and retention of students and faculty/staff.

## KEYWORDS

transition back to in-person learning, college students' retention, mental health, diversity and equity, COVID-19 pandemic

## INTRODUCTION

In March of 2020, as a result of the global pandemic, universities and colleges across the United States closed their campuses to in-person learning (Reuge et al. 2021). Students, faculty, and staff were asked to work and learn from home, while simultaneously experiencing lockdown either with their family/roommates or isolated completely. In addition to trying to learn and work, many faculty/staff and students were concurrently helping either children or younger siblings with their remote learning (Lee et al. 2021). Universities varied in their approach to the pandemic. Some implemented remote learning into the fall 2021 semester, while others opened back up quickly and with limited safeguards beginning in the fall of 2020. Expectations of social distancing, wearing a mask in public, and quarantining when exposed to COVID-19 varied from state to state and school to school.

The change of learning modality and social isolation during this time heavily influenced faculty/staff and students, which may have led to retention issues (Howell et al. 2021) due to declined emotional engagement or positive attitudes toward learning (Wester et al. 2021). In other words,

institutions found it challenging to keep students enrolled and progressing toward their educational goals as these disruptions affected the stability of the learning experiences. More college students did not show up to classes and some did not return to campus after the onset of the pandemic, while faculty/staff considered leaving their jobs during the challenging transitions that are still overshadowed by the pandemic. Numerous studies have focused on college students' mental health during the pandemic (Lee et al. 2021; Son et al. 2020; Wang et al. 2020), especially during the beginning and middle (spring 2020–spring 2021), however the transition back to in-person learning deserves more attention and research. This transition period can be more stressful and requires adjustments for all involved. Much of the research on the challenges in higher education during the pandemic focused on the modality of learning and student experiences, not on the faculty/staff. A handful of research reflected the mental health struggles among college students, but faculty/staff's mental health has not been addressed, especially in the United States, with one exception (Melnik et al. 2023). Melnik and colleagues argued for the importance of addressing mental well-being in the pandemic context with all higher education community members. Unfortunately, faculty/staff's mental well-being has not been a focus among scholars or administrators. In addition to factors related to mental health and well-being, the disconnection and lack of agency throughout the pandemic can discourage college students and faculty/staff from being motivated and engaged in the learning process.

The current study aims to address the gaps by exploring the experiences and perspectives of college students and faculty/staff during the transition back to in-person learning and examining the factors associated with students' retention.

### **Diversity, equity, belonging, and inclusion on university campuses**

Four main social justice factors are often examined in higher education settings: diversity, equity, the sense of belonging, and inclusion. Research has found a student's ability to feel connected to others—a sense of belonging at the institution—affects student retention rates and overall academic success (Pedler, Willis, and Nieuwoudt 2022; Wolf et al. 2017). Belonging is defined as “being accepted and invited to participate; being part of something and having the opportunity to show up as yourself” (Wise 2022, 3). Students with a higher sense of belonging reported stronger academic motivation and interest in their academic program, and those who considered leaving the university scored lower on sense of belonging (Pedler, Willis, and Nieuwoudt 2022). These social justice factors are important to consider not only in the context of student retention, but also for the well-being of faculty and staff. Employees who feel included and valued are more likely to be engaged in their work and make positive contributions to their work setting (Bakker 2011). Naylor and Mifsud (2020) identified three types of structural inequality and argued that instead of placing the responsibilities on students to build cultural capital, the institutions should implement concrete measures to include all members of the campus community—students, faculty, and staff.

### **COVID-19 pandemic and university retention issues**

The pandemic had an immediate impact on both college student (Howell et al. 2021) and faculty/staff retention rates (Coll and Ruch 2023). Data from the College Board and the National Student Clearinghouse, a comprehensive report included responses from 10 million students who attended 22,000 high schools and 2,800 colleges, revealed a general decline among two-year college program students across all racial backgrounds, with the biggest decline (7.6%) for Hispanic students. Similarly, students' neighborhood disadvantages worsened the declines in retention rates. In addition to the nationally representative report, individual colleges also analyzed their retention and

graduation rates in relation to equity. For example, California State University-Fullerton shared in the spring of 2023, the gap in graduation rates for underrepresented students and their counterparts widened, probably due to lack of resources such as internet access and quiet study spaces (Samaniego 2023). Increased family obligations during the remote learning phase could have been an additional barrier. The decreased transfer rates during the pandemic also reflects this equity gap (Zhao 2021). Community colleges that serve underrepresented racial minority and Hispanic-serving institutions were impacted more severely than other types of college campuses.

During the pandemic, institutions of higher education quickly shifted from in-person to an ever-changing modality of instruction. Due to the uncertainty that came with those shifts, faculty/staff experienced burnout at a higher rate (Boamah et al. 2022). According to Boamah et al. (2022), nursing faculty in higher education experienced an increase in work-life interference as teaching from home became the norm. Faculty and staff had reduced boundaries around work and their personal life with the increase of teaching from home. This blurring of lines between personal and professional time not only contributed to increased levels of burnout, but also led to higher turnover rates in nursing faculty (Boamah et al. 2022). Given the limited empirical attention to exploring faculty's wellbeing during the pandemic, the research findings about nursing faculty may give us some insight into higher education employees. This also pointed out the need for additional research on the wellbeing and retention of faculty and staff in addition to college students.

#### *Mental health and retention*

During the 2021–2022 academic year, the latest Healthy Minds survey reported a worsened mental health epidemic across college campuses (Alonso 2023). Close to half of college students from 133 campuses (44%) reported depressive symptoms, 37% had anxiety, and 15% considered suicide, the highest percentage over the last 15 years. Students with mental health issues are more likely than their peers to discontinue academic programs (Arria et al. 2013). Faculty members and peer support may help college students who struggle with mental health issues (Arenas et al. 2021; Kalkbrenner, Jolley, and Hays 2021) as the university administrators enhance access to mental health counseling services. Meanwhile, faculty and staff also saw an increase in depressive symptoms and anxiety during this time. Support from administrators has an equally important role in ensuring faculty and staff can access resources such as physical wellness policies, socialization opportunities, and counseling services for their own mental health (Weyandt et al. 2020).

#### **Self-determination theory and basic psychological needs among college students**

Self-determination theory guided this study (Deci and Ryan 2004). This theory claims humans have three basic psychological needs that are universally crucial for flourishing and well-being: autonomy, relatedness, and competence. Autonomy refers to a sense of volition or agency, where students feel their voices are heard, opinions are respected, and feelings are considered while also receiving needed guidance. Relatedness is a sense of connection or belonging where students feel they are cared for by others and they also care for others. Competence is a felt confidence in wanting to try new tasks and embrace challenges. The current literature is rich in college students' perceived autonomy in their academic motivation and success (Alsharari et al. 2019; Huescar Hernández et al. 2020). Jenó, Danielsen, and Raaheim (2018) revealed that perceived competence negatively correlated with college students' dropout intention, but positively associated with academic achievement. In the same study, the researchers used two items from basic psychological needs to reflect college students' perceived relatedness, which linked intrinsic academic motivation (but only

for graduate students) and perceived competence. Research is still slim and therefore limited our ability to understand the roles of three basic psychological needs in college students' persistence and retention especially during challenging social contexts.

### **The current study**

Given the immediate impact and long-term implications of the pandemic on college campuses, particularly on college student retention, we conducted a mixed-method approach examining an entire academic department. This study explored the perceptions of all department members, including students, faculty, and staff, regarding the department's DEBI climate, students' perceived basic psychological needs, and students' retention during the transition back to on-campus learning. The study had three major research questions:

RQ1: At the department level, how did department members perceive department-wide climate related to diversity and inclusion during their transition back to in-person learning during the pandemic?

RQ2: What were some challenges and evidence of persistence during such a transition?

RQ3: What factors were associated with students' retention in the Department of Family and Consumer Sciences (FCS)?

## METHODS

### **Research site and procedure**

The university's Institutional Review Board approved the current study. The research site was the Department of Family and Consumer Sciences (FCS) where five academic majors are hosted: human development and family science, FCS teacher education, interior design, fashion design and merchandizing, and food, nutrition, and dietetics. At the time of this research, the academic department included 31 faculty members (16 tenured or tenure-track, 15 non-tenure-track), five administrative professional staff, and approximately 525 undergraduate students and 101 graduate students. Each program in FCS consists of a series of three core FCS classes, along with major specific classes. The department is considered an applied learning environment, so each major includes lab classes and/or field specific observations and work. Many courses in these majors rely on in-person interactions and hands-on experiences.

FCS instructors used in-person teaching modality until March 2020 when the US claimed a national crisis as the world was, and still is, dealing with the COVID-19 pandemic. Instructors at the research site received emails the week leading up to spring break asking them to switch all in-person teaching, including lab classes, to fully online courses. This learning modality lasted for another two semesters (fall 2020 and spring 2021). Fall 2021 was the first semester FCS members transitioned from online learning to in-person learning with masks required inside the classrooms. Fully returning to campus with restrictions presented more challenges than before spring of 2020 as the university enforced 10-day quarantines after positive tests for COVID-19 for all FCS members, per CDC and the university policy, and reduced class sizes to allow for social distancing.

As FCS members witnessed and experienced incredible levels of challenges, the department ad hoc committee of diversity, equity, belonging, and inclusion (DEBI) sought to pursue opportunities to explore FCS member's experiences regarding DEBI and factors that might challenge or support FCS members. This ad hoc committee was appointed by the department chair and members represented each of the academic majors as well as an academic advisor and three student representatives. The committee selected student representatives based on nominations or self-nominations. Collectively,

the committee made efforts to secure an inaugural DEBI grant from the college level to help fund the current study.

During spring 2022, the department chair distributed a survey link to the department listserv for all FCS members, including students and faculty/staff. All participants, whether students or faculty/staff, responded to the same set of survey questions. Due to the limited number of staff members in FCS, we combined faculty and staff as one group to protect participants' anonymity. The resulting sample ( $N = 93$ ) included 68 students, 18 staff or faculty and seven who did not share their status. The majority of the participants self-identified as female (86.2%) and non-Hispanic White (77.6%) which is a similar representation of the students in the department. Participants' demographics are presented in Table 1. We chose to report gender and race for all participants to protect the anonymity of faculty/staff given the smaller number of faculty/staff participants.

Table 1. Demographics of participants

Gender (all participants)	n (%)
Female	75 (80.6%)
Male	9 (9.7%)
Prefer not to answer	3 (3.2%)
Race (all participants)	
Non-Hispanic Black	5 (5.4%)
Non-Hispanic White	66 (71%)
Latina/o	2 (2.2%)
Asian or Pacific Islander	4 (4.3%)
Multiracial	5 (5.4%)
African American	1 (1.1%)
Middle Eastern	1 (1.1%)
Positions (all participants)	
Student	68 (73.1%)
Staff/faculty	18 (19.4%)
Academic standing (n = 68; only student participants)	
Freshman	8 (11.8%)
Sophomore	7 (10.3%)
Junior	18 (26.5%)
Senior	23 (33.8%)
Graduate student	12 (17.6%)
Academic programs (n = 68; only student participants)	
Fashion design and merchandizing	11 (16.2%)
FCS teacher education	9 (13.2%)
Food, nutrition, and dietetics	18 (26.5%)
Human development and family science (including child life)	17 (25%)
Interior design	12 (17.6%)
Students by geographic locations (n = 68; only student participants)	
International students	4 (5.9%)
In-state students	59 (86.8%)
Out-of-state students	3 (4.4%)
First-generation students (n = 68; only student participants)	8 (11.8%)
Students who need accommodations services (n = 68; only student participants)	4 (5.9%)

## Measures

### *FCS DEBI climate*

We adapted department diversity, equity, belonging, and inclusion climate items from the pillars of progress (Houston 2021), developing 10 pillars in total to be addressed at the university level. The current study examines the first pillar: commitment to care, respect, trust, and authentic relationships. Participants responded to eight items on a six-point Likert scale (1 = *strongly disagree* to 6 = *strongly agree*). Example items included “there are opportunities for intentional relationship building and supportive dialogue among students, faculty, and staff in the Department of Family and Consumer Sciences,” and “FCS provides strategies to identify ‘cultural taxation’ (cultural taxation: the extra work students, faculty or staff of marginalized communities take on by repeatedly being the representation of their community).” Detailed mean and standard deviation (SD) of the eight items are presented in Table 2 with a breakdown of students vs. faculty/staff responses. Due to the difference in the number of participants between the two groups, we created a composite score of FCS DEBI Climate by averaging all eight items across all participants. This composite score is used for all subsequent analyses.

Table 2. Factor loadings, means, and standard deviations of department DEBI climate (pillar items)

Pillar items	Factor loadings		Mean/SD	
	Students	Faculty staff	Students	Faculty staff
1) There are opportunities for intentional relationship building and supportive dialogue among students, faculty, and staff in the Department of Family and Consumer Sciences.	.79	.55	4.91/1.25	5.28/1.07
2) There are opportunities for constructive feedback by underrepresented students in the Department of Family and Consumer Sciences.	.93	.95	4.57/1.18	4/1.24
3) There are opportunities for constructive feedback by underrepresented staff/faculty members in the Department of Family and Consumer Sciences.	.89	.89	4.63/1.12	4.4/1.30
4) There is a process for conflict resolution, reconciliation, and restorative justice in the Department of Family and Consumer Sciences.	.93	.61	4.56/1.19	4.75/1.36
5) FCS recognizes and incentivizes for equity diversity inclusion-action labor and accomplishments.	.90	.93	4.85/1.16	5.13/1.13
6) FCS provides strategies to identify “cultural taxation” (cultural taxation: the extra work students, faculty or staff of marginalized communities take on by repeatedly being the representation of their community).	.93	.83	4.66/1.26	3.55/1.04
7) FCS provides strategies to prevent “cultural taxation” (cultural taxation: the extra work students, faculty or staff of marginalized communities take on by repeatedly being the representation of their community).	.88	.79	4.38/1.24	3.64/1.21
8) FCS has leadership that promotes a culture of open communication, inclusion, and trust.	.83	.61	5.19/1.10	5.33/.91

In addition to the quantitative measure, we asked participants the following questions to elicit in-depth responses: (1) In what ways is FCS welcoming and inclusive? Can you provide an example? (2) In what ways is FCS not welcoming? (3) What are the barriers to establishing an inclusive environment and equitable opportunities? (4) Where are the opportunities for improvement?

#### *FCS members' challenges*

We invited participants to share if they felt they struggled during fall 2021, and if so, at what point of the semester they felt they were struggling: (a) I never felt that I was struggling, (b) at the beginning of the semester, (c) in the middle of the semester, (d) towards the end of the semester, and (e) throughout the semester. We also invited participants to comment on the following questions: (1) What might be some of the top reasons that made you feel off balance? and (2) What helped you cope with those struggles?

During the transition time and still under the impact of the pandemic, we asked participants to share their experiences that might indicate evidence of persistence which may help us gain insight on retention. We asked the participants "In the past semester, have you thought about taking a break? (a) yes, I wanted to take a break; (b) no, I was motivated to stay; and (c) unsure." For those who selected yes or no, they were also invited to share the reasoning behind their thought processes.

#### *Students' basic psychological needs*

We assessed college students' basic psychological needs with the basic psychological need satisfaction scale (Deci and Ryan 2000; Gagné 2003); students responded to 21 questions on a 7-point scale from 1 (not at all true) to 7 (very true). These 21 items included three subscales: perceived autonomy, relatedness, and competence. The example item for autonomy subscale is "I generally feel free to express my ideas and opinions;" and the example item for relatedness subscale is "People in my life care about me;" and the example for competence subscale is "Most days I feel a sense of accomplishment from what I do." The Cronbach's  $\alpha$ s for students are: .73 (seven items of autonomy), .79 (eight items for relatedness), and .70 (six items for competence).

## ANALYSIS

To answer the first research question (how do FCS members perceive FCS climate in relation to diversity and inclusion during their transition back to in-person learning during the pandemic?), we conducted content analysis independently and discussed our disagreements during peer debriefing meetings. We generated codes and then combined them into larger categories. Themes emerged after consolidating categories based on their conceptual associations.

To answer the second research question (what were some challenges and evidence of persistence during such a transition?) we conducted content analysis in a similar process as described above.

Finally, to answer the third research question (what factors were associated with FCS students' retention?), we conducted two sets of one-way ANOVA analyses to compare three groups of students: (1) students who wanted to take a break, (2) those who were motivated to stay, and (3) those who were unsure in terms of students' perspectives of FCS' diversity, equity, belonging, and inclusion climate, as well as students' perceived basic psychological needs satisfaction.

## RESULTS

### **FCS DEBI climate**

FCS members, including students, staff, and faculty shared their perspectives on their experiences within the department of FCS. The qualitative results came from the participants'

responses to a series of open-ended questions. As a result of the inductive coding process, three major themes emerged, suggesting FCS is inclusive, and four themes emerged to help FCS address barriers and make improvements.

#### *FCS Is Inclusive*

Qualitative coding showed that among those who responded to the question ( $n = 65$ ; 69.9%) “In what ways is FCS welcoming and inclusive? Can you provide an example?” students ( $n = 52$ ; 80%) demonstrated the agreement that the staff, faculty, and administrators in FCS made great efforts to help students feel included and that they belong through their relationship building within and beyond the classroom setting, or other common areas, such as administrative offices and hallways. One student’s response was representative of their peers:

I love the FCS department SO SO SO much. I feel like there is nothing that compares on campus. I feel like my professors/staff/admin go out of their way to make connections with the students and it makes you feel like you matter.

Likewise, faculty who responded to this question ( $n = 12$ ; 66.7%), expressed a similar perspective, with responses focusing on faculty/staff responsiveness, friendly and welcoming demeanors, and willingness to help others ( $n = 9$ ). One faculty responded: “I think the tone of our community the responsiveness of faculty to students is welcoming and inclusive—it’s baked into the culture.”

Second, FCS students also perceived that there were various opportunities to receive support or professional development, such as the ambassador program, fall kick-off event, and the opportunities to join and lead registered student organizations (RSOs): “It is inclusive to all sorts of passions and interests. You can join clubs that aren’t even your area of study.”

Third, FCS faculty/staff felt the environment and the atmosphere was positive, safe, and welcoming in general. A staff/faculty member shared their experience working with FCS colleagues when they first started this job:

The people who work in FCS are some of the most welcoming and inclusive people I’ve ever met. Starting a new job far away from my family and during COVID is the best example I can provide of this. I have felt supported since day one.

For those who have been at FCS for a while, faculty/staff have observed their supportive relationship with each other and how faculty and staff have supported students: “Every single professor I come in contact with is serious about helping students and reaching out. The faculty are very supportive of each other as well.”

Fourth, though both students and faculty/staff believe FCS is inclusive in general, students focused on specific instructors, events, or student groups, while faculty/staff emphasized the overall community and culture.

#### *FCS has room for improvement*

In addition to the strengths of the FCS environment, we asked both students and faculty/staff to provide ways that FCS may not be welcoming or any barriers they believe exist in establishing an inclusive environment with equitable opportunities. Noticeably, when asked “In what ways is FCS not welcoming? What are the barriers to establishing an inclusive environment and equitable opportunities? Where are the opportunities for improvement?” 60 participants responded to this



question (64.5% response rate). Among these responses, 26 (43.3%) FCS members reported that they perceived no barriers, including 25 (96.2%) students. We discussed the major themes below, based on the experiences shared by the 34 FCS members who faced barriers or provided suggestions for improvement.

First, FCS members voiced their frustrations on the homogenous demographics in the department which may restrict department members from growing through exposure to diverse perspectives. For example, a student shared, “my classes are majority white. This makes sense as we are in a majority white area. However, it makes it difficult to hear other perspectives.” Faculty/staff’s responses also reflected a need to further diversify FCS members; “We could (continue) to further diversify our faculty.” One student reflected the department is predominately white that can be a barrier to make FCS inclusive and welcoming:

They have never actively sought out racial/social justice training for students, perhaps for staff, or for RSO leaders. To be truly welcoming and inclusive, FCS could take an active role in diversifying our department cuz . . . we’re pretty white!

Second, inequitable treatment can also happen to FCS members. One student expressed their concern about availability of professors stating, “Some professors are not there for extra support when needed.” Another student voiced their concern stating:

I feel like some of the professors definitely partake in favoritism. With that said, I believe it’s a barrier that’s not enhancing the environment to be inclusive. If a student feels left out or discriminated against on purpose, that individual will not seek out equitable opportunities or go to the professor for aid. Professors can try to be more cognizant regarding playing favorites, and show equal treatment regarding how they view a student, despite some personal information they might know.

Similar issues were encountered by faculty/staff:

I don’t actually know when the faculty meetings are or if I’m supposed to be attending, so that could be improved/remedied, I suppose. I also haven’t felt like [staff] cares much for me, but I’m not sure how to fix that. I’ve been made aware that I struggle with imposter syndrome, so it’s possible that it’s just because I have been having a hard time feeling like I belong here with people who are so much more intelligent and experienced than I am. That’s not something anyone can improve but me.

Finally, two students indicated their biggest barriers were more related to the overall physical environment. The building in which the FCS department is housed is located away from the center of campus and therefore when students have classes in the building, they typically stay in the building between classes. A reflection of the need for student space to be available is reflected by one student who suggested FCS, “improve the building for more group workspace and more accessible spaces.”

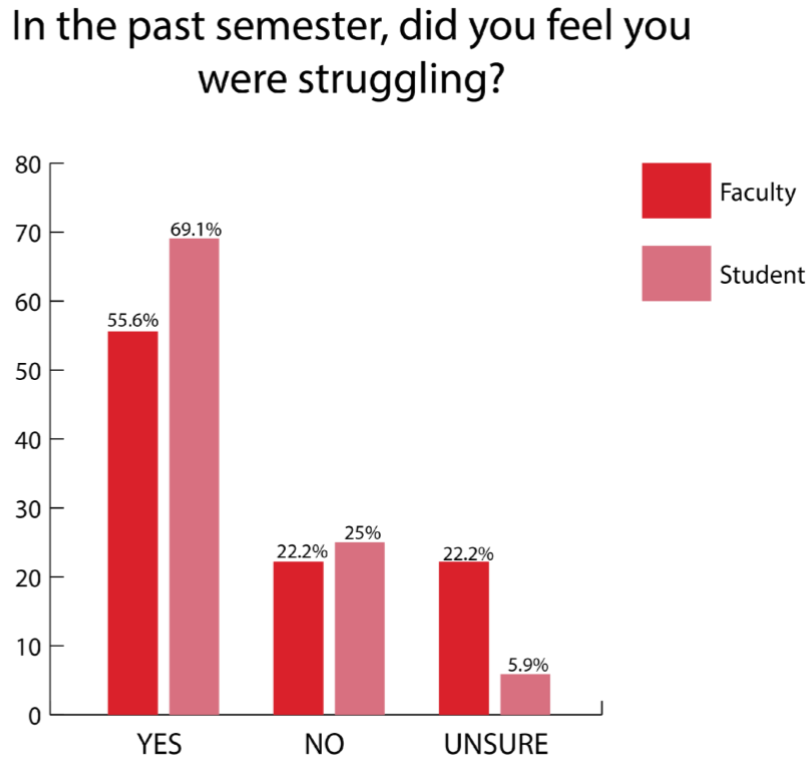
### **Existing challenges that FCS members faced**

#### *Struggles*

Both students and faculty/staff responded to a series of questions related to whether and how they felt they were struggling during the past semester (fall 2021). In response to the question: “In the

past semester, did you feel that you were struggling?” 63 (67.7%) participants indicated that they were struggling during the fall 2021 semester. This was the first time the university welcomed students back for in-person teaching modality with masks on. Among those who struggled, 47 were students, 10 were faculty/staff members, and six did not share their status (Figure 1).

Figure 1. Percentages of students and faculty/staff participants who reported that they struggled



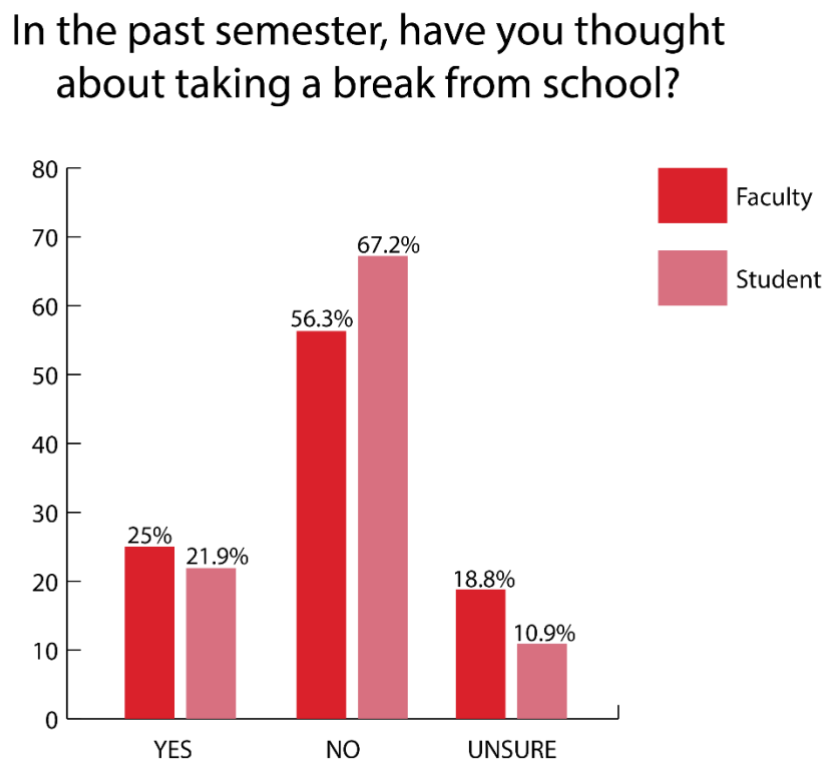
Note. “Yes” is participants who responded that they struggled in the past semester; “No” is participants who responded that they did not struggle in the past semester; “Unsure” is participants that were not sure if they struggled or not in the past semester.

We also followed up with a question “when during the semester did you feel that you were struggling the most?” Seventy-one (76.3%) participants responded to this question, including 51 students and 14 faculty/staff. Approximately half of student participants ( $n = 23$ ) reported they struggled throughout the fall 2021 semester. Among the 14 faculty/staff participants, seven reported they struggled throughout the fall semester. The respondents indicated a sense of being off-balance as they struggled with handling multiple social roles including but not limited to school, work, social life, family, and finances. Both students and faculty/staff shared their frustrations about instructor-student relationships and additional workload challenges due to the transition from remote learning to in-person learning modality while still combatting the everyday challenges related to the pandemic. Both students and faculty/staff members sought various strategies to cope with their struggles. There are similarities between students and faculty/staff members in terms of support systems and self-care activities. Both shared that their support systems involve family and friends; both intentionally take time off for reading, exercise, and other leisure activities; both indicated pursuing therapy.

*Break (persistence status)*

Similarly, students and faculty/staff responded to a series of questions related to whether they wanted to take a break from school and the reasons behind their decisions. Despite the prevalence of struggles that existed during fall 2021, most FCS members (67.2% student participants [ $n = 43$ ], 56.3% faculty participants [ $n = 9$ ]) did not want to take a break from school/work (Figure 2). These results indicate that although many FCS members experienced struggles during this transitional period, they largely demonstrated persistence and commitment to remaining in their programs.

Figure 2. Percentages of students and faculty/staff who reported that they wanted to take a break from school



Note. "Yes" is participants who responded that they wanted to take a break from school in the past semester; "No" is participants who responded that they wanted to stay in school in the past semester; "Unsure" is participants that were not sure if they wanted to stay in school or wanted to take a break.

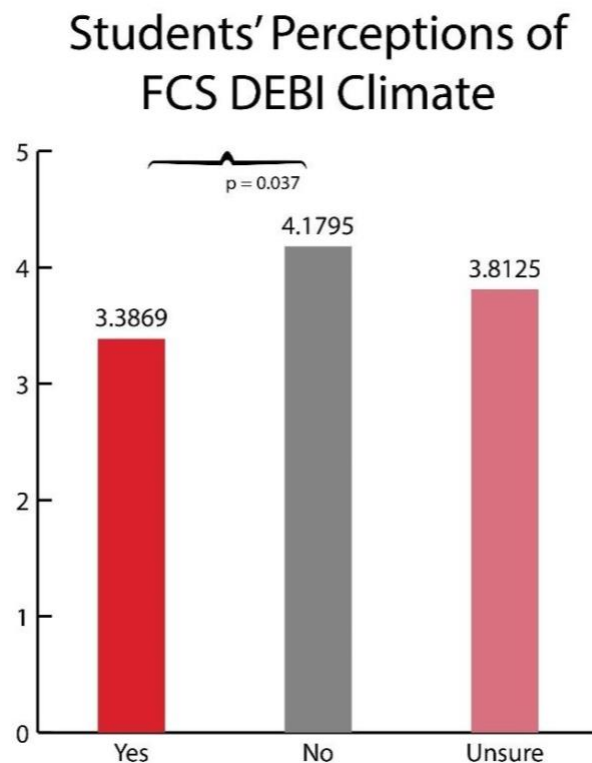
Some possible rationales included they didn't feel like quitting, they were near graduation, or simply due to a sense of responsibility and interest in their programs. Many faculty members indicated the reason for not wanting to take a break was due to the fact that it was their job. Some went on to state "I want to continue to help my students" and "I love what I do." For both faculty/staff and students who wanted to take a break at a certain point during the semester, the reasons included mental health struggles, such as stress, overwhelm, and burnout, or loss of interest in school/career path.

### DEBI experiences and basic psychological needs satisfaction differed by persistence statuses

To explore the factors associated with students' persistence statuses ( $n=68$ ), we ran two sets of one-way ANOVA analyses to identify whether there are differences in terms of students DEBI experiences at FCS and their basic psychological needs satisfaction among three groups of students (group 1) those who wanted to take a break, (group 2) those who were motivated to stay, and (group 3) those who were unsure.

First, to compare students' perception of FCS DEBI climate through their responses to the pillars measure that reflect FCS DEBI climate across three groups of students (group 1, group 2, and group 3), a one-way ANOVA test was performed in order to detect mean-level differences in students' perceptions of FCS DEBI climate across these three groups. Findings revealed mean-level differences for FCS DEBI climate [ $F(2,83) = 3.20, p = .046$ ]. Tukey's HSD Test for multiple comparisons revealed that students who were motivated to stay scored higher than their peers who wanted to take a break ( $p = .037, 95\% \text{ C.I.} = [-1.55, -.04]$ , Figure 3). When students perceived FCS as endorsing diversity, equity, belonging, and inclusion, students were less likely to want to take a break from school. Please note that in Figures 3–6, "Yes" is students who responded that they wanted to take a break from school; "No" is students who responded that they wanted to stay in school; "Unsure" is students who were not sure if they wanted to stay in school or wanted to take a break.

Figure 3. ANOVA results of students' perceptions of FCS DEBI climate by persistence status



Next, in order to compare students' basic psychological needs across the three groups, we performed a one-way ANOVA. This detected mean-level differences on students' basic psychological needs across these three groups of students (wanted to take a break, motivated to stay, and unsure). Findings revealed mean-level differences for perceived autonomy [ $F(2,61) = 5.45, p = .007$ ], for

perceived relatedness [ $F(2,61) = 5.54, p = .006$ ], and for perceived competence [ $F(2,61) = 6.29, p = .003$ ]. Tukey's HSD Test for multiple comparisons showed that students who were motivated to stay scored higher on perceived autonomy ( $p = .019$ , 95% C.I. = [-1.27, -.09], Figure 4), relatedness ( $p = .011$ , 95% C.I. = [-1.18, -.13], Figure 5), and competence ( $p = .002$ , 95% C.I. = [-1.58, .34], Figure 6) than those who considered taking a break.

Figure 4. ANOVA results of students' perceived autonomy by persistence status

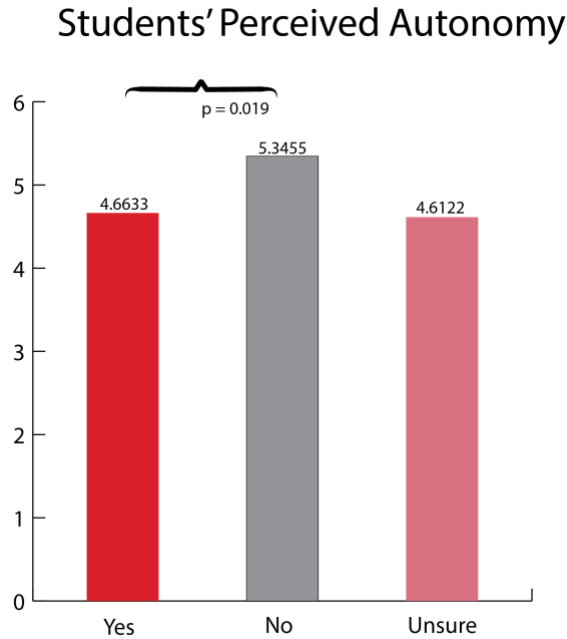


Figure 5. ANOVA results of students' perceived relatedness by persistence status

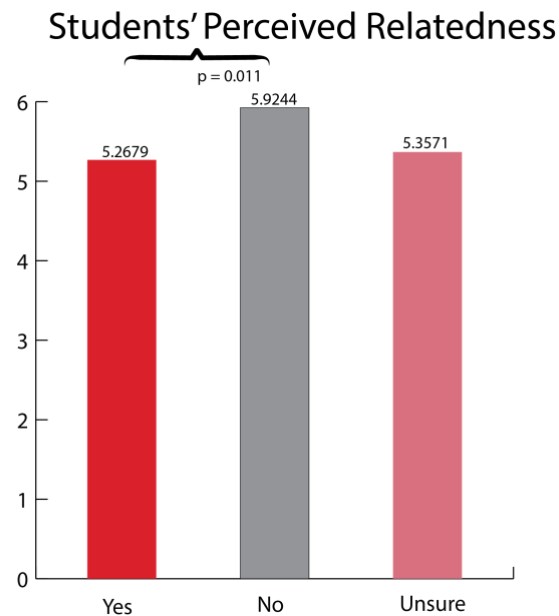
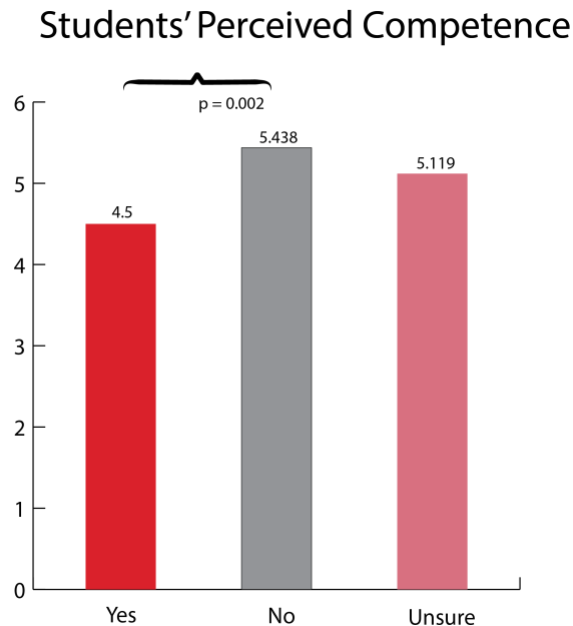


Figure 6. ANOVA results of students' perceived competence by persistence status



## DISCUSSION

The transition back to campus after an extended period of online learning uncovered important insights into the mental health struggles faced by the FCS community. The stress and anxiety of navigating this shift contributed to increased mental health challenges, influencing both students and faculty/staff desires to take a break from school or work. This highlights an important link between mental wellness and academic retention. Understanding and addressing these mental health issues is essential for fostering a supportive and inclusive educational environment that promotes the well-being of both students and faculty/staff.

### **Mental health issues and struggles in the department during the pandemic**

FCS members, including both students and faculty/staff, expressed that they faced significant struggles during the pandemic due to mental health issues, particularly during the fall of 2021 when transition from online learning to in-person learning took place. Those who said they wanted to take a break from school identified mental health issues as a major contributor. Multiple studies found direct associations between mental health issues and declined retention rates among college students (Arria et al. 2013; Thomas et al. 2021). Similarly, research suggests faculty/staff had increased levels of anxiety and depression during and immediately after the pandemic period (Weyandt et al. 2020). This is not unique to the department at the university where the study was conducted; as shown in a national survey, mental health issues are alarming across college campuses (Alonso 2023).

### **Department DEBI environment and student retention**

Survey results indicated that members viewed the climate of the department as inclusive and appreciated the department's focus on mutual respect. Cultural and racial diversity, however, is lacking and recruitment efforts ought to consider further diversifying the student population. Students who considered taking a break from school scored the department DEBI environment lower than students who were motivated to stay during the transition back to in-person learning. One possible explanation is that students may not have maintained connections to their peers and department staff/faculty during the remote learning semesters, likely resulting in a lower sense of

belonging than peers who managed to stay in contact with other members from the focal department. Due to losing connections and a reduced sense of belonging, these students may have become less interested in school and consequently less motivated to persist (Pedler, Willis, and Nieuwoudt; Wolf et al. 2017). As students return to in-person learning, the department began new initiatives such as fall kick-off events, freshman welcome events, meet your faculty lunch, and so forth to cultivate a sense of belonging. Similar initiatives should continue to gain momentum and become a norm at the focal department to continuously help students reconnect, maintain, and further enhance their sense of belonging as a member of the department. Building connection into the culture of the department has become an important area of focus for future initiatives.

### **Basic psychological needs and student retention**

Basic psychological needs including autonomy, relatedness, and competence are three universal needs that can help individuals flourish (Deci and Ryan 2004). Students who are more motivated to stay during their transition back to in-person learning scored higher on a sense of perceived autonomy, relatedness, and competence than students who wanted to take a break. This indicates that college students' levels of basic needs satisfactions are likely to link to retention, especially during challenging times, such as transition in learning modality, the pandemic, or when personal crises (mental health or family emergencies) pile up. Given the benefits of basic needs satisfaction (Alsharari et al. 2019; Huéscar Hernández et al. 2020), in particular their contributions to students' persistence and retention (Jeno, Danielsen, and Raaheim 2018), departmental and institutional efforts can focus on enhancing students' autonomy (agency and need for guidance), relatedness (sense of connectedness and community), and competence (felt confidence).

### LIMITATIONS AND FUTURE RESEARCH

Despite the unique pitch and large efforts to engage all members of the academic department in the current project, there are several limitations worth discussing. First, we invited students, staff, and faculty to share their experiences and perspectives in retrospect as the data collection occurred in spring 2022 while their transition from remote learning to in-person learning took place in fall 2021. Though we can capture their holistic view of their experiences of the entire fall 2021 semester, it might not reflect their experiences and perspectives accurately. Future research might use a daily diary approach in combination with photovoice methodology to elicit real-time experiences and perspectives from department members.

Second, the current study is a cross-sectional design by nature to reflect members' struggles and evidence of persistence during the transition from remote to in-person learning. There is a need to follow students over time from their freshman year or first semester as new transfer students until the year after they graduate from FCS in order to gain a further understanding of their experiences as FCS members, their struggles, and support for retention, graduation, and pursuit of future careers or further education in a holistic view.

Third, the topic under investigation would benefit from using a participatory action research approach where an advisory board can be formed with students from different backgrounds and staff and faculty of different statuses. This advisory board would form research questions, design survey or interview questions, conduct analysis, and report results, which would then be used as integrated, authentic interventions to address the needs of FCS members. This approach would allow FCS to embed interventions naturally into the culture of the department while taking into account the comprehensive nature of the underlying issues. Future research should aim to expand the current study by implementing an advisory board and longitudinal approach.

Lastly, this research did not include analyses across the different academic programs or fully explore basic psychological needs satisfaction for faculty/staff due to an inadequate sample size. Conducting such analyses could be valuable for program coordinators, the academic department, and other department constituents. Future studies should aim to recruit more participants from each major and more faculty/staff to allow further comparisons.

## IMPLICATIONS

The current study pointed out the evidence of department efforts to address diversity, equity, inclusion, and belonging for students, staff, and faculty members. Based on feedback from this survey, a range of activities were implemented to support these goals. For instance, the department organizes the “Connect with FCS” event each semester, which facilitates networking and community building among students, staff, and faculty. The “Fall Kick Off” events specifically target freshman and sophomore/transfer students to help them integrate into the academic community. Over the course of two semesters, the department implemented book clubs to foster inclusive discussions and perspectives. The department also conducted a panel discussion to address DEBI issues and promote open dialogue. Furthermore, the department secured a DEBI grant to fund initiatives aimed at improving the DEBI climate, including this research project. Recruitment efforts have been expanded to include scholarship opportunities for high school students, and there is now student representation on the FCS DEBI committee to ensure diverse voices are heard in decision-making processes. Finally, follow-up surveys are conducted to assess the effectiveness of these initiatives and to make necessary adjustments. In addition to the activities and events, the department has developed a new space in the building intended for studying, socializing, and hosting student events.

Despite ongoing barriers, actions have been taken to address the diverse representations among students through recruitment and retention initiatives at the department level. The campus administration continues to prioritize mental health and retention policies and activities, particularly for those from underserved communities, including first-generation students, racial minorities, and other marginalized groups. Additionally, new opportunities for funding have been introduced to support DEBI related initiatives that benefit both faculty/staff and students. It is important to note that the mental health of faculty and staff should also be considered, and the secondary trauma that faculty and staff experience through their students should be addressed and cared for.

As evidenced in the study, both students and faculty/staff experienced struggles during the transitions due to the change in learning modality because of the pandemic. Struggles are multifaceted and may lead to mental health issues and retention concerns for both students and faculty/staff. Frequent check-ins and regular social events to help students and faculty/staff increase consciousness of well-being and self-care can help. These social events can include, but are not limited to, DEBI book clubs, beginning of the semester welcome events, connections through department social media platforms, and both informal and formal check-ins throughout various academic programs in the format of one-on-one meetings or mentor-students as group meetings. In the meanwhile, faculty/staff’s mental well-being and sense of belonging should also become a focal point for the upper administrators as well as the campus climate.

Further, students’ perceptions of DEBI and basic psychological needs are linked to their likelihood of persisting in their degree program. Administrators, staff, and faculty’s efforts to cultivate a DEBI climate and to support their autonomy, relatedness, and competence are likely to address student retention issues, with special attention to the historically underserved/underrepresented student population. Most importantly, as Naylor and Mifsud (2020) argued, instead of forcing students, especially those who are socially and economically marginalized, to form social



connections, institutions or those with institutional power can enact concrete measures to embrace all students by respecting their unique identity, understanding their challenges, and valuing their perspectives due to their specific demographic characteristics. Community-based action research would be an effective approach to help administrators and scholars receive insight from constituents with serious considerations of the context and their social locations. Academic departments can benefit from taking a holistic approach to their diversity, equity, belonging, and inclusion initiatives by starting conversations with all members of their department and ensuring representation from a variety of backgrounds.

#### ACKNOWLEDGMENTS

We would like to thank the Department of Family and Consumer Science's Diversity, Equity, Belongingness, and Inclusion committee for all the input on this project. Additionally, we would like to thank the College of Applied Sciences and Technology at Illinois State University for providing funding for this project through the CAST Innovation in Diversity, Equity, Belongingness, and Inclusion Grant.

#### AUTHOR BIOGRAPHIES

*Amy M. Bardwell, PhD (USA) is an associate professor in the Department of Family and Consumer Sciences at Illinois State University. Her research focuses on consumer behavior in the food service industry. She also explores student belongingness in the college setting.*

*Chang Su-Russell, PhD (USA) CFLE, is an associate professor in the Department of Family and Consumer Sciences at Illinois State University. Her research focuses on parents' decision-making in childbearing and childrearing and cultivating civically engaged college students.*

#### ETHICS

This research was approved by the Illinois State University Institutional Review Board.

#### REFERENCES

- Alonso, Johanna. 2023. "Student Mental Health Worsens, but More are Seeking Help." *Inside HigherEd*, March 16. <https://www.insidehighered.com/quicktakes/2023/03/17/student-mental-health-worsens-more-are-seeking-help>.
- Alsharari, Nizar Mohammad, and Muhammad Turki Alshurideh. 2020. "Student Retention in Higher Education: The Role of Creativity, Emotional Intelligence and Learner Autonomy." *International Journal of Educational Management* 35 (1): 233–47. <https://doi.org/10.1108/IJEM-12-2019-0421>.
- Arenas, Daniel Luccas, Anna Carolina Viduani, Ana Margareth Siqueira Bassols, and Simone Hauck. 2021. "Peer Support Intervention as a Tool to Address College Students' Mental Health Amidst the COVID-19 Pandemic." *International Journal of Social Psychiatry* 67 (3): 301–02. <https://doi.org/10.1177/0020764020954468>.
- Arria, Amelia M., Kimberly M. Caldeira, Kathryn B. Vincent, Emily R. Winick, Rebecca A. Baron, and Kevin E. O'Grady. 2013. "Discontinuous College Enrollment: Associations with Substance Use and Mental Health." *Psychiatric Services* 64 (2): 165–72. <https://doi.org/10.1176/appi.ps.201200106>.
- Bakker, Arnold B. 2011. "An Evidence-Based Model of Work Engagement." *Current Directions in Psychological Science* 20 (4): 265–69. <https://doi.org/10.1177/0963721411414534>.
- Boamah, Sheila A., Hanadi Y. Hamadi, Farinaz Havaei, Hailey Smith, and Fern Webb. 2022. "Striking a Balance Between Work and Play: The Effects of Work-Life Interference and Burnout on Faculty Turnover Intentions and Career Satisfaction." *International Journal of Environmental Research and Public Health* 19 (2): 809. <https://doi.org/10.3390/ijerph19020809>.

- Coll, Kenneth M., and Charles P. Ruch. 2023. "Leadership Challenges Facing Academic Deans in the Post-Pandemic Environment: Observations and Strategies." *Journal of Educational Leadership and Policy Studies* 7 (2).
- Deci, Edward L., and Richard M. Ryan. 2000. "The 'What' and 'Why' of Goal Pursuits: Human Needs and the Self-Determination of Behavior." *Psychological Inquiry* 11 (4): 227–68. [https://doi.org/10.1207/S15327965PLI1104\\_01](https://doi.org/10.1207/S15327965PLI1104_01).
- Deci, Edward L., and Richard M. Ryan, editors. 2004. *Handbook of Self-Determination Research*. University Rochester Press.
- Gagné, Marylène. 2003. "The Role of Autonomy Support and Autonomy Orientation in Prosocial Behavior Engagement." *Motivation and Emotion* 27: 199–223. <https://doi.org/10.1023/A:1025007614869>.
- Houston, D. 2021. *Pillars of Progress: Tools to Assess EDI-A Readiness and Change*. Illinois State University.
- Howell, Jessica, Mike Hurwitz, Jennifer Ma, Matea Pender, Greg Perfetto, Jeffrey Wyatt, and Linda Young. 2021. "College Enrollment and Retention in the Era of COVID." *College Board*. [https://research.collegeboard.org/media/pdf/enrollment\\_retention\\_covid2021\\_post.pdf](https://research.collegeboard.org/media/pdf/enrollment_retention_covid2021_post.pdf).
- Huéscar Hernández, Elisa, Juan Antonio Moreno-Murcia, Luís Cid, Diogo Monteiro, and Filipe Rodrigues. 2020. "Passion or Perseverance? The Effect of Perceived Autonomy Support and Grit on Academic Performance in College Students." *International Journal of Environmental Research and Public Health* 17 (6): 2143. <https://doi.org/10.3390/ijerph17062143>.
- Jeno, Lucas M., Anne G. Danielsen, and Arild Raaheim. 2018. "A Prospective Investigation of Students' Academic Achievement and Dropout in Higher Education: A Self-Determination Theory Approach." *Educational Psychology* 38 (9): 1163–84. <https://doi.org/10.1080/01443410.2018.1502412>.
- Kalkbrenner, Michael T., Amber L. Jolley, and Danica G. Hays. 2019. "Faculty Views on College Student Mental Health: Implications for Retention and Student Success." 2021. *Journal of College Student Retention: Research, Theory & Practice* 23 (3): 636–58. <https://doi.org/10.1177/1521025119867639>.
- Lee, Jenny, Matthew Solomon, Tej Stead, Bryan Kwon, and Latha Ganti. 2021. "Impact of COVID-19 on the Mental Health of US College Students." *BMC Psychology* 9 (1): 95. <https://doi.org/10.1186/s40359-021-00598-3>.
- Melnyk, Bernadette Mazurek, Alai Tan, Andreanna Pavan Hsieh, Megan Amaya, Erica P. Regan, and Leanne Stanley. 2023. "Beliefs, Mental Health, Healthy Lifestyle Behaviors, and Coping Strategies of College Faculty and Staff during the COVID-19 Pandemic." *Journal of American College Health* 71 (9): 2740–50. <https://doi.org/10.1080/07448481.2021.1991932>.
- Naylor, Ryan, and Nathan Mifsud. 2020. "Towards a Structural Inequality Framework for Student Retention and Success." *Higher Education Research & Development* 39 (2): 259–72. <https://doi.org/10.1080/07294360.2019.1670143>.
- Pedler, Megan Louise, Royce Willis, and Johanna Elizabeth Nieuwoudt. 2022. "A Sense of Belonging at University: Student Retention, Motivation and Enjoyment." *Journal of Further and Higher Education* 46 (3): 397–408. <https://doi.org/10.1080/0309877X.2021.1955844>.
- Reuge, Nicolas, Robert Jenkins, Matt Brossard, Bobby Soobrayan, Suguru Mizunoya, Jim Ackers, Linda Jones, and Wongani Grace Taulo. 2021. "Education Response to COVID-19 Pandemic, a Special Issue Proposed by UNICEF: Editorial Review." *International Journal of Educational Development* 87: 102485. <https://doi.org/10.1016/j.ijedudev.2021.102485>.
- Samaniego, Dominic. 2023. "Disparity in Graduation Rates Increase after COVID-19 Pandemic." *Daily Titan: The Student Voice of California State University*, April 19. [https://dailytitan.com/news/campus/disparity-in-graduation-rates-increase-after-covid-19-pandemic/article\\_31e5c8ca-dcca-11ed-8fcc-8bad75beefa3.html](https://dailytitan.com/news/campus/disparity-in-graduation-rates-increase-after-covid-19-pandemic/article_31e5c8ca-dcca-11ed-8fcc-8bad75beefa3.html).
- Son, Changwon, Sudeep Hegde, Alec Smith, Xiaomei Wang, and Farzan Sasangohar. 2020. "Effects of COVID-19 on College Students' Mental Health in the United States: Interview Survey Study." *Journal of Medical Internet Research* 22 (9): e21279. <https://doi.org/10.2196/21279>.
- Thomas, Nathaniel S., Peter B. Barr, Derek L. Hottell, Amy E. Adkins, and Danielle M. Dick. 2021. "Longitudinal Influence of Behavioral Health, Emotional Health, and Student Involvement on College Student Retention." *Journal of College Student Development* 62 (1): 2–18. <http://doi.org/10.1353/csd.2021.0001>.

- Wang, Xiaomei, Sudeep Hegde, Changwon Son, Bruce Keller, Alec Smith, and Farzan Sasangohar. 2020. "Investigating Mental Health of US College Students During the COVID-19 Pandemic: Cross-Sectional Survey Study." *Journal of Medical Internet Research* 22 (9): e22817. <https://doi.org/10.2196/22817>.
- Wester, Emma R., Lisa L. Walsh, Sandra Arango-Caro, and Kristine L. Callis-Duehl. 2021. "Student Engagement Declines in STEM Undergraduates During COVID-19–Driven Remote Learning." *Journal of Microbiology & Biology Education* 22 (1): 10–1128. <https://doi.org/10.1128/jmbe.v22i1.2385>.
- Weyandt, Lisa L., Alyssa Francis, Emily Shepard, Bergljót Gyda Gudmundsdóttir, Isabella Channell, Avery Beatty, and George J. DuPaul. 2020. "Anxiety, Depression, Impulsivity, and Mindfulness Among Higher Education Faculty During COVID-19." *Health Behavior and Policy Review* 7 (6): 532–45.
- Wise, Susie. 2022. *Design for Belonging: How to Build Inclusion and Collaboration in Your Communities*. Ten Speed Press.
- Wolf, David A. Patterson Silver, Jacob Perkins, Sheretta T. Butler-Barnes, and Thomas A. Walker Jr. 2017. "Social Belonging and College Retention: Results from a Quasi-Experimental Pilot Study." *Journal of College Student Development* 58 (5): 777–82. <http://doi.org/10.1353/csd.2017.0060>.
- Zhao, Hayley. 2021. "Research Findings Transfer Enrollment Drops as Disparities Grow Deeper Over the Pandemic Year." *Diverse Issues in Higher Education*, August 31. <https://www.diverseeducation.com/students/article/15114353/research-finds-transfer-enrollment-drops-as-disparities-grow-deeper-over-the-pandemic-year>.



Copyright for the content of articles published in *Teaching & Learning Inquiry* resides with the authors, and copyright for the publication layout resides with the journal. These copyright holders have agreed that this article should be available on open access under a Creative Commons Attribution License 4.0 International (<https://creativecommons.org/licenses/by-nc/4.0/>). The only constraint on reproduction and distribution, and the only role for copyright in this domain, should be to give authors control over the integrity of their work and the right to be properly acknowledged and cited, and to cite *Teaching & Learning Inquiry* as the original place of publication. Readers are free to share these materials—as long as appropriate credit is given, a link to the license is provided, and any changes are indicated.