## Student Thriving Before and During the Covid-19 Pandemic: A Cross-Sectional Study of Professional Students in Clinical Laboratory Science, Occupational Therapy, and Therapeutic Recreation

Jayne Yatczak Eastern Michigan University

Teresa Mortier Eastern Michigan University

Heather Silander Eastern Michigan University

The Covid-19 pandemic changed students' educational experience in dramatic ways, especially in regards to the switch to total online learning and lack of in-person interactions with classmates and faculty. In addition, the crisis in healthcare affected students' clinical experience placements. Mental health issues were exacerbated. Despite these changes and challenges it is difficult to hypothesize how it impacted student's thriving. This article expands upon the authors' previous research by exploring thriving levels during the semester before the pandemic and the three subsequent semesters. Students in Clinical Laboratory Science, Occupational Therapy and Therapeutic Recreation programs participated in an online survey using the Thriving Quotient (Schreiner, 2010) and open-ended questions to collect quantitativequalitative data. Results showed that difficulties juggling demands decreased; challenges of online learning subsided and became a support to thriving and loneliness was experienced across all four semesters. Quantitative and qualitative data from our study suggests that, despite the disruption and dissatisfaction, students in our professional programs continued to thrive academically. Recommendations for improving student thriving are provided.

Keywords: student thriving, student success, Covid-19

## INTRODUCTION

Previous research on students' thriving in Clinical Laboratory Science (CLS), Occupational Therapy (OT), and Therapeutic Recreation (TR) programs showed that students had a high level of academic thriving (Yatczak et. al. 2021). Students in professional programs have an end goal of graduation, becoming a member of their profession, and are confident in their field of study which leads to a more successful and thriving college experience (Sriram &Vetter, 2012; Schreiner et. al., 2010; Yatczak et. al. 2021). Being in a professional program seemed to support academic thriving. This same research by Yatczak et. al. (2021) revealed that students struggled to manage all the demands in their lives. Additionally, almost a third of

students reported feeling lonely and wished they had more close friends. The demands of school and work were often cited as the reason it was difficult to engage in and maintain social connections.

Then came the pandemic. The Covid-19 pandemic affected higher education and students' educational experience. Universities responded to the public health crisis by reducing face-to-face learning and replacing it with online learning when possible, thrusting students into a virtual learning environment. The pandemic not only disrupted students' learning, it disrupted every aspect of daily life, including work, finances, and relationships with friends and family. Our purpose was to find out if students in our professional programs are thriving more or less, in what areas are they thriving, and what factors do they attribute to their thriving/surviving? The extreme challenges experienced during the pandemic may provide us with insight on how to support students' thriving during demanding and difficult times as we move forward.

### **BACKGROUND AND SIGNIFICANCE**

The Covid-19 pandemic affected students, especially in regards to online learning and lack of in-person interactions with classmates and faculty. Difficulty in transitioning from in-person to online education created stress with the suddenness of the transition being especially detrimental (Heilferty et al. 2021). The rapid shift to online learning created challenges for students, including limited electronic resources and meeting family and work responsibilities (Ramos-Morcillo et al. 2020). Students also had to adjust to and follow public health measures such as social distancing, wearing masks, stay-at-home orders, movement restrictions, and quarantines. Many students had to deal with the physical health aspects of having Covid-19 themselves or their family members.

The existing mental health crisis of students across campuses was exacerbated by the pandemic. Active Minds (2020), the leading nonprofit for mental health education on college campuses, surveyed college students in April 2020 and found that 80% of students surveyed reported that Covid-19 negatively impacted their mental health, increasing stress and anxiety, feelings of loneliness, sadness, financial strain, and relocation issues. The Healthy Minds (2020) study revealed that 60% of students experienced greater financial stress and 30% had a change in living situation.

A meta-analysis of anxiety and depressive symptoms in college students during the pandemic showed the prevalence of anxiety symptoms among students was 36% for males and 30% for females; the prevalence of depressive symptoms was 56% for females and 34% for males (Chang et al. 2021). In another study, 71% of university students interviewed attributed stress and anxiety to the Covid-19 outbreak (Son et al. 2020). Worry over the vulnerability of family members, bereavement or serious illness of relatives also contributed to students' poor mental health (Alemany-Arrebola et al. 2020).

For students in health professions, on-site clinical experiences were often substituted with online virtual simulations (Woolliscroft, 2020). Fogg et. al. (2020) surveyed undergraduate and graduate nursing and other health professional students regarding their experience with virtual clinical rotations. Students reported issues surrounding internet access, family issues, lack of motivation, and instructors' inexperience with technology caused them stress. While some students liked the flexibility of online courses, it decreased their confidence about practicing within their field (Smith et. al. 2020) and increased uncertainty about their direction (Byrnes et. al. 2020; Richardson et. al. 2020). The crisis in healthcare brought on by the pandemic also forced the discontinuation, cancellation, and delay of clinical activities. The suspension and cancellation of internships, needed for graduation by many students, left students in limbo and uncertain of when they would graduate (Carolan et. al. 2020; Tokuc & Varol, 2020).

The increase in mental health issues and stress surrounding the changes due to the Covid-19 pandemic make it important for educators to know if it has affected students' thriving and what aspects of thriving may have been affected. Thriving as a measure of student success goes beyond the typical metrics used in professional programs: grades, GPA, and passing certification exams. Thriving provides educators with a holistic way to assess students' success. The importance of understanding and supporting students' thriving is critical and cannot be understated. Thriving college students are, "academically successful; they also experience a sense of community and a level of psychological well-being that contributes to their

persistence to graduation and allows them to gain maximum benefit from being in college" (Schreiner, 2010, p. 4).

Schreiner (2010) described three domains of thriving which are considered "malleable" or open to change, "academic, interpersonal, and intrapersonal" (p. 5). There are seven categories across these three domains, (1) engaged learning, (2) academic determination, (3) positive perspective, (4) diverse citizenship, and (5) social connectedness; (6) psychological sense of community and (7) institutional integrity were added in 2019 (Schreiner, 2010).

The current study builds on the previous research on students' thriving in professional programs conducted by Yatczak et. al (2021). The aim was to investigate the thriving of students in Clinical Laboratory Science, Occupational Therapy, and Therapeutic Recreation in the semester before the pandemic started and in the subsequent three semesters.

The pandemic presents a unique situation and it is difficult to hypothesize how it affected students' thriving. One could reason that increased stress from the pandemic and the exacerbation of mental health issues decreased their level of thriving. However, it is possible that being in a professional program supported students' thriving, or perhaps students were able to adapt to changes in school and life in general, demonstrating the kind of resilience and coping we hope to develop in our future clinicians, or perhaps changes made due to the pandemic inadvertently supported students' thriving. An additional aim of this study was to identify supportive factors that contributed to students' thriving, and if students were able to identify any positive aspects arising from the changes due to the pandemic.

#### **METHODS**

This repeated cross-sectional study of CLS, OT, and TR students is part of a larger study examining student thriving and clinician resilience. In this study, the researchers employed a quantitative-qualitative descriptive mixed methods design. The study design provided a snapshot of the thriving of students at particular points in time and across time; it provided information about how common it is for students to be thriving. Thriving, the variable being studied could be influenced positively or negatively by immediate events or circumstances. Although a cross-sectional study cannot determine causation, it can lead to the development of studies that explore specific areas of thriving in greater depth.

After approval from the university's Institutional Review Board (IRB), the Thriving Quotient survey (Schreiner, 2010) was distributed electronically via email to all current students in CLS, OT and TR (n=708) in November 2019, March 2020, December 2020, and March 2021. Students in CLS and TR were invited to complete the undergraduate version and OT students were invited to complete the graduate version.

The Thriving Quotient is a 35-item instrument with seven constructs: Engaged Learning, Academic Determination, Social Connectedness, Diverse Citizenship, Positive Perspective, Psychological Sense of Community and Institutional Integrity. Each item is a statement that requires students to respond on a 6-point Likert scale with response options ranging from 1=strongly disagree to 6 = strongly agree (Schreiner, 2010).

At the end of the survey, students were asked to rate their overall level of thriving in a question presented as: "Thriving is defined as, getting the most out of your college experience, so that you are intellectually, socially and psychologically engaged and enjoying the college experience. Given that definition, to what extent do you think you are THRIVING as a college student this semester?" (Schreiner, 2010). Students rated their overall level of thriving from consistently thriving, thriving most of the time, somewhat thriving, surviving, barely surviving, not even surviving. Students were also asked to describe factors contributing to their rating in an open-ended question, "What has happened this semester that has led to your perception of whether you are thriving or not?" A second open-ended question, "If you haven't already referenced the COVID-19 pandemic in the prior question, please share how the pandemic has shaped or influenced your perception of whether you are thriving or not?" was added to the survey in the winter 2021 semester.

Analysis of qualitative data consisted of initial coding, using descriptive coding (Saldana, 2013) for each semester. During the second stage of coding, axial coding was employed. For each semester the codes

that were identified were then compared to each other revealing the central codes. The dominant or most frequently used codes were chosen, creating themes (Pandit, 1996). The frequency of codes were calculated to show the barriers and supports to thriving. The emerged themes were then matched to the appropriate thriving construct.

#### PARTICIPANTS

This study took place at a university in Southeast Michigan. The university has approximately 18,000 students. The university is primarily a commuter campus with 85% of students commuting to campus for classes prior to the pandemic (IRIM, 2019). Many students work several jobs off-campus and have family responsibilities.

The clinical laboratory science program is an entry-level Bachelor program. Students enter a second admission process before their junior/senior year. The program admits 10-15 students who have completed the necessary prerequisite courses. The occupational therapy program is an entry-level Master program and combined Bachelor/Master program. Master students enter the program with a Bachelor degree. Combined students are admitted to the program after completing their junior year. The program admits a cohort of 38 students once per year in January. The therapeutic recreation program is an entry-level Bachelor program. Students can begin anytime but typically will enter program specific courses in their junior year. The program averages 12-15 new students each year.

Each program requires students to complete a series of clinical rotations. In their senior year CLS students take didactic coursework and complete a six month internship under the supervision of registered medical laboratory scientists. Within the six semester didactic portion of the OT program students complete part-time fieldwork (6-8 hours/week) in the third, fourth and sixth semesters. After completing coursework students enter full-time fieldwork which consists of two 3-month rotations at two different clinical sites with supervision by a registered occupational therapist. Full-time fieldwork begins in January. Therapeutic recreation students complete three, 60-hour fieldwork placements within the didactic portion of the TR program. After completion of coursework, a minimum 14 week/560 hours internship under the supervision of a Certified Therapeutic Recreation Specialist is completed. After completing coursework and internships, students in all three programs are eligible to take the national exam for their respective profession.

Fall 2019 classes were offered fully face-to-face. Mid-way through the Winter 2020 semester there was the quick pivot to online learning which occurred March 12, 2020. During the pandemic (Winter 2020, Fall 2020, and Winter 2021) the university continued to offer face-to-face courses by exception only and with extensive public health precautions in place.

#### RESULTS

This section presents overall thriving data, followed by results from questions that were common to both the undergraduate and graduate survey, quotes from the open-ended questions and highlights of qualitative comments. A total of 708 surveys were sent to the CLS, OT, and TR students over four semesters. A total of 287 responses were received for an overall response rate of 40.5%. Response rates for each program across all semesters were: CLS (35%), OT (48%), TR (27%).

Demographic information for respondents from each program was averaged across all four semesters (see Table 1).

## TABLE 1

	CLS	ОТ	TR
Male Female Other	8% n=4 92% n=47 0%	13% n=19 86% n=127 1% n=1	6% n=6 92% n=89 2% n=2
Age	Below 20 42.5% n=22 21-30 52.1% n=25 31-40 2.5% n=1 41-50 2.5% n=1 50+ 0	Below 20 0% 21-30 90% n= 132 31-40 6% n= 9 41-50 3% n= 5 50+ .5% n= 1	Below 20         33% n= 31           21-30         63% n=62           31-40         2% n=2           41-50         1% n=1           50+         .1% n=1
Race & Ethnicity	Caucasian 92% n=47 African American 1% n= 1 Asian-American/Asian/ Native Hawaiian/Pacific Islander 7% n= 4 Arabic 1% n= 1 Native American/Alaskan Native 0% Latino/Hispanic 0% Prefer not to respond 1% n= 1	Caucasian 89.2% n=131 African American 1.5% n=2 Asian-American/Asian/ Native Hawaiian/Pacific Islander 1.1% n=2 Arabic 1.6% n=3 Native American/Alaskan Native .77% n=1 Latino/Hispanic .77% n=1 Prefer not to respond 4.1% n=6	Caucasian 85% n= 82 African American 5% n= 5 Asian-American/Asian/ Native Hawaiian/Pacific Islander 3% n=3 Arabic 1% n=1 Native American/Alaskan Native 0% Latino/Hispanic 4% n= 4 Multiracial/biracial 2% n= 2
Household income	less than \$30 18% n=9 \$30-59 33% n= 17 \$60-119 25% n= 13 \$120+ 20% n= 10 No answer 2% n=1	less than \$30 35% n=51 \$30-59 19% n=28 \$60-119 40% n=59 \$120+ 5% n=9	less than \$30 15% n=15 \$30-59 25% n= 24 \$60-119 32% n= 31 \$120+ 20% n= 19 No answer 4% n=4
Hours worked	None         23% n=           12         12           Less than 20         29% n=15           21-         40         43% n=22           40+         0%	None         33% n=48           Less than 20         47% n=69           21-40         19% n=29           40+         1% n=1	None         17% n= 16           Less than 20         37% n= 34           21-40         33% n= 30           40+         13% n=12
Difficulty paying for school	No diff 31% n=15 A little diff 14.25% n=8 Some diff 29% n=15	No diff 18% n=26 A little diff 27% n=40 Some diff 24% n=35 Fair amount 25% n=37 Great diff 6% n=9	No diff $38\%$ n= 37 A little diff $22\%$ n= 21 Some diff $20\%$ n= 20 Fair amount $9\%$ n= 9 Great diff $10\%$ n= 10

Fair amount 14% n= 7 Great	
diff 8% n=4	

Students in all three programs who responded to the survey were predominantly Caucasian (88.7%) and female (89.6%). The majority of students (93.5%) are 30 years old or younger; 42.5% CLS and 33% TR students are below 20. Approximately half of the students reported an annual household income of \$59,999 or less. When asked to rate how difficult it is for them to pay for school after considering financial aid received and the money they have, only 18% of OT students reported having no difficulty paying for school compared to 31% CLS and 38% TR students. The highest percentage of hours worked weekly was in the CLS program, with 43% working between 21-40 hours. The Winter 2020 semester saw a decrease of total hours worked by students across all three programs due to the pandemic. The number of hours rebounded slightly in Winter 2021, but did not reach pre-pandemic levels.

### **Overall Thriving**

Overall Thriving across the four semesters from Fall 2019 to Winter 2021 for each program is presented. (See Figures 1, 2, 3 and Tables 2, 3, and 4).

## FIGURE 1 THRIVING ACROSS FOUR SEMESTERS IN CLS PROGRAM:FALL 2019-WINTER 2021

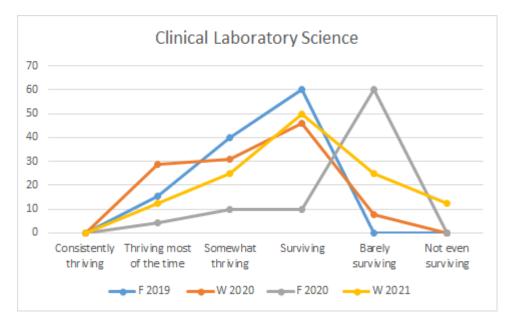


FIGURE 2 THRIVING ACROSS FOUR SEMESTERS IN THE OT PROGRAM: FALL 2019-WINTER 2021

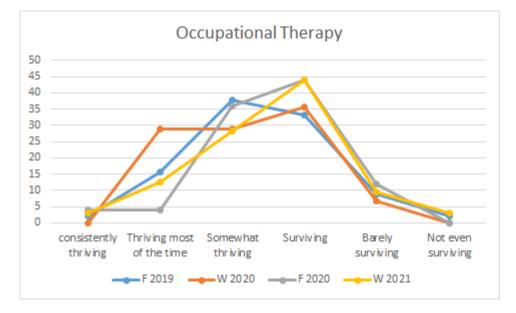
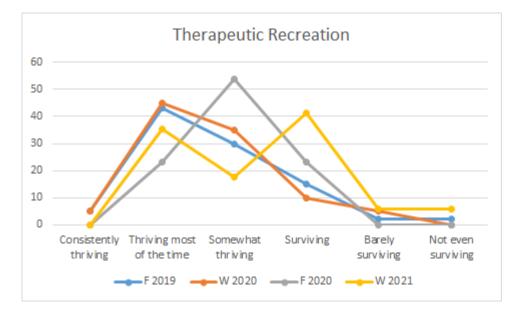


FIGURE 3 THRIVING ACROSS FOUR SEMESTERS IN THE TR PROGRAM: FALL 2019-WINTER 2021



From Fall 2019 to Winter 2021 overall thriving tended to shift to more students somewhat thriving, surviving, barely surviving, or not even surviving. Across the four semesters only 6% of all students reported consistently thriving. The overall level of thriving for each program had the tendency to follow the same pattern every semester with a few exceptions. In Fall 2020, CLS students reported the lowest overall level of thriving (30%) and the highest number of students who were barely surviving (60%). Fall 2020 also saw the lowest number of OT and TR students that were thriving most of the time (4% and 23% respectively). In Winter 2021, TR had the greatest number of students split between those who were thriving most of the time (35.3%) and those who were surviving (41.2%).

### **Areas of Thriving**

Results from all respondents to the Likert-response survey items for each area of thriving. For all items, percentages for the somewhat agree/agree/strongly agree items, were combined for presentation. (See tables 2-8).

#### **Academic Thriving**

Academic thriving includes two scales; engaged learning and academic determination. These two scales evaluate whether or not students are feeling engaged in the learning and are implementing steps to accept responsibility for their learning.

#### **Engaged Learning**

Engaged learning is when students are energized by the learning process. Students are meaningfully processing course material and making connections between new knowledge and prior knowledge. Students focused and actively thinking about new learning opportunities and discussing with others what they are learning constitutes "deep learning" (Tagg, 2003).

Item	Fall 2019	Winter 2020	Fall 2020	Winter 2021
I feel energized by the ideas I am learning	CLS 89% OT 86.7% TR 90%	CLS 92% OT 97.8% TR 95%	CLS 90% OT 84% TR 99%	CLS 100% OT 81.3% TR 94.1%
I am able to apply what I am learning in class to something else in my life	CLS 87.8% OT 87.8% TR 100%	CLS 99.7% OT 97.7% TR 95%	CLS 90% OT 92% TR 99%	CLS 87.5% OT 90.7% TR 100%
I am learning material in classes that are worthwhile to me as a person	CLS 94% OT 95.6% TR 98%	CLS 84.7 OT 97.7 TR 95	CLS 100% OT 96% TR 99%	CLS 100% OT 100% TR 100%

TABLE 2ENGAGED LEARNING FROM FALL 2019- WINTER 2021

Table 2 shows that despite the challenges in learning brought on by the pandemic, most students in CLS, OT, and TR (91.2%) across all four semesters agreed with the statement that what they were learning could apply to something else in their life and they were learning material that was relevant and worthwhile to them. Changes due to the pandemic made some students feel less certain about their ability to apply what they were learning. This feeling is captured in a statement made by an OT student in Winter 2021, "The pandemic definitely has negatively impacted my ability to thrive in my learning. I feel less prepared to start applying what I am learning in fieldwork."

Agreement with the statement that they feel energized by what they were learning remained high across all four semesters for CLS (92.7%) and TR students (94.5%). OT students were slightly less energized by what they were learning with an average of 87.4% across the four semesters. Responses by OT students varied with the highest level of agreement being reported in Winter 2020 (97.8%) and the lowest in Winter 2021 (81.3%), which was the lowest number for all three programs across all four semesters.

### Academic Determination

Academic determination is characterized by investment of effort, motivation to succeed, intentional pursuit of one's goals, ability to manage one's time and the multiple academic and personal demands of the college environment, and knowledge of how to apply one's strengths.

Item	Fall 2019	Winter 2020	Fall 2020	Winter 2021
I am confident about reaching my educational goals.	CLS 99.9% OT 88.8% TR 97.5%	CLS 92.2% OT 95.6% TR 95%	CLS 90% OT 84% TR 100%	CLS 75% OT 93.7% TR 100%
Even if assignments are not interesting to me, I find a way to keep working on them until they are done well.	CLS 95% OT 97.7% TR 97.5%	CLS 84.6% OT 95.6% TR 95%	CLS 100% OT 100% TR 100%	CLS 75% OT 93.8% TR 100%
Others would say I am a hard worker.	CLS 100% OT 100% TR 95%	CLS 100% OT 100% TR 95%	CLS 100% OT 100% TR 100%	CLS 87.5% OT 100% TR 94.1%
I know how to apply my strengths to achieve academic success,	CLS 94.%1 OT 95.6% TR 100%	CLS 100% OT 97.8% TR 100%	CLS 80% OT 96% TR 99%	CLS 75% OT 93.8% TR 94.1%
I am good at juggling all the demands of college life.	CLS 89.4% OT 78.1% TR 82.5%	CLS 76.9% OT 93.3% TR 95%	CLS 80% OT 80% TR 92%	CLS 62.5% OT 90.7% TR 94.1%

# TABLE 3ACADEMIC DETERMINATION

Results in Table 3 show that across the four semesters students agree with the statement that they were confident about reaching their educational goals (CLS 89.3%, OT 90.5%, and TR 98.1%). Although confidence about reaching their goals was consistently high, in Fall 2020 only 84% of OT students were

confident, and in Winter 2021 only 75% of CLS students were confident. Issues related to clinical experiences may provide some insight into the lower level of agreement with this statement.

In Winter 2021, CLS clinical placements were greatly impacted by staff shortages at the clinical sites and the sites' lack of confidence in being able to provide a meaningful learning experience. In OT, the change to simulations and telehealth and the varied nature and uncertainty of fieldwork, with multiple cancellations of full-time fieldwork in Fall 2020, made students less confident about their ability to enter practice. An OT student shared, "All of my fieldwork has been virtual so far and I feel like this is another reason why I won't be successful in my future fieldwork and career." Another OT student shared similar concerns, "Staying at home due to the COVID-19 virus and the resulting delay for my last level II placement has led to increased anxiety about being able to finish in a timely manner and about securing employment once I am able to graduate. I feel like I'm in a stalemate right now in regards to school and finishing the program and I'm not really sure how I can be most effective in this current environment."

Across the four semesters 88.6% CLS, 96.8% OT, and 98.1% TR students agreed with the statement that they found ways to get their assignments completed even when the assignments were not interesting. In Winter 2021 only 75% of CLS students agreed with this statement. The majority of students agreed with the statement that others would say they are a hard worker (CLS 96.8%, OT100%, and TR 96%). In Fall 2019, most students (95.6%) agreed with the statement that they knew how to apply their strengths to achieve academic success. This number increased to 99.3% in Winter 2020, dropped to 91.6% in Fall 2020 and dropped again in Winter 2021 (88%). The lowest number of students to agree with this statement were CLS students in Fall 2020 (80%) and Winter 2020 (75%).

All students experienced a sudden halt in face-to-face classes in Fall 2020. However, CLS students seem to have been the most affected by the uncertainty which may have contributed to their low agreement with items in academic determination and is reflected in the following comment, "Covid [does] not allow us to go on campus, but we still have to continue learning, and the last minute decisions on in-person lab practicals due to Covid restrictions."

In Fall 2019, 83% of students agreed with the statement that they are able to juggle all the demands of college life, with OT having the lowest number (78.1%), followed by TR (82.5%) and CLS (89.4%). OT students were explicit in describing their difficulties in juggling demands, "We have no occupational balance in our life. We only do school work. There is no time for family, friends, [or] self-care." OT students had a "lack of free time." CLS and TR students also noted difficulties with work/school balance, "I have had a very big workload this semester at school on top of making money and working. This makes it difficult to cram everything in."

The number of students good at juggling demands increased to 88.4% in Winter 2020 (CLS 76.9%, OT 93.3%, TR 95%). It dropped again in Fall 2020 to an average of 84% (CLS 80%, OT 80%, TR 92%). Comments in Fall 2020 were more about managing all the responsibilities that shifted to being at home or being virtual due to the pandemic. For example, "I have lost my job due to Covid-19, one of my children has school at home 3 days/ per week, my other daughter is in a medical drug trial, and I have a newborn in the house. All these things have taken away from my ability to thrive in this program." The average number of students able to juggle demands for Winter 2021 remained at 84% (CLS 62.5%, OT 90.7%, TR 94.1%).

It is noteworthy that in Winter 2021 the number of OT and TR students good at juggling demands was above pre-pandemic levels (OT 78.1% to 90.7% and TR 82.5% to 94.1%). Interestingly, every semester during the pandemic the numbers for OT and TR were higher than the numbers reported the semester before the pandemic. Possible causes include, students were better at juggling demands, decreased time spent at work increased time spent on other demands, or changes in their academic experience implemented due to the pandemic made it easier for them to juggle demands (ex. online courses eliminated travel time to campus).

We cannot ignore the decline in CLS students' ability to juggle demands from a high of 89.4% in Fall 2019 to a low of 62.5% in Winter 2021. CLS students experienced uncertainty whether the workplace would continue to conduct internships along with last minute decisions by the program regarding lab practicals may have made it harder for students to juggle demands.

## **Interpersonal Thriving**

Interpersonal thriving consists of two aspects; social connectedness and diverse citizenship.

## Social Connectedness

Social connectedness includes having good friends, being in a relationship with others who listen, and feeling connected to others so that one is not lonely; it measures the presence of healthy relationships and friendships in students' campus experiences (Schreiner et al., 2013). The significance of social connectedness is that very little that is positive is solitary (Seligman, 2011, p. 20).

TABLE 4
SOCIAL CONNECTEDNESS

Item	Fall 2019	Winter 2020	Fall 2020	Winter 2021
I feel like my friends really care about me.	CLS 100% OT 97.8% TR 100%	CLS 100% OT 100% TR 100%	CLS 100% OT 100% TR 100%	CLS 87.5% OT 96.9% TR 100%
I feel content with the kinds of friendships I currently have.	CLS 100% OT 91.1% TR 97.5%	CLS 92.2% OT 95.5% TR 100%	CLS 100% OT 96% TR 100%	CLS 75% OT 87.6% TR 100%
I feel lonely because I have few close friends with whom to share my concerns.	CLS 28.9% OT 26.3% TR 30%	CLS 61.4% OT 24.4% TR 30%	CLS 20% OT 36% TR 30%	CLS 50% OT 50% TR 53%
Others make friends more easily.	CLS 37.3% OT 42.2% TR 47.5%	CLS 46% OT 53.3% TR 70%	CLS 60% OT 44% TR 53%	CLS 75% OT 50% TR 82.4%
I don't have as many close friends as I wish I had.	CLS 73.6% OT 73.3% TR 35%	CLS 45.9% OT 33.3% TR 30%	CLS 40% OT 28% TR 23%	CLS 50% OT56.3% TR 82.3%
It is hard to make friends in my program/on campus.	CLS 36.8% OT 24.4%	CLS 53.8% OT 26.7% TR 60%	CLS 40% OT 40% TR 53%	CLS 75% OT 40.6% TR 88.2%

TR 42.5%		

Results in Table 4 show that feeling lonely was experienced by students in all three programs and across all four semesters: Fall 2019 (28.4%), Winter 2020 (38.6%), Fall 2020 (28.6%), and Winter 2021 (51%). Students frequently used words like "feeling lonely" and "isolated" in the open-ended question. One CLS student during Fall 2020 attributed the isolation to their work outside of classes, "I work in a clinical lab handling Covid19 specimens so I've had to isolate heavily. The only places I've allowed myself to go to are in-person labs and work."

In Fall 2019 35% TR students agreed with the statement, they do not have as many friends as they would like; this number increased to 82.3% in Winter 2021. Although the percentage of CLS and OT students that agreed with this statement decreased over the four semesters; the average remained at or above 50% (CLS 73.6%, 45.9%, 40%, and 50%) and (OT 73.3%, 33.3%, 28%, and 56.3%). Overall, in Winter 2021 62.8% of students wish they had more friends, highlighting the desire and need for social connections.

The number of students that agreed with the statement that it was hard to make friends in their program/on campus increased from Fall 2019 to Winter 2021. CLS went from 36.8% to 75% and TR from 42.5% to 88.2%. OT, in which students go through the program as a cohort, had a smaller increase from 24.4% to 40.6%. Although a cohort may support developing friendships it may also make it harder to make friends. As one OT student stated, "the cohort is too cliquey."

The number of students in all three programs that agreed with the statement "others make friends more easily" saw an increase from Fall 2019 (42.3%) to Winter 2021 (69.1%). In Winter 2021, 75% CLS, 50% OT and 82.4% TR students agreed with this statement. On a positive note, 87% of students (75% CLS, 87.6% OT, 100% TR) agreed with the statement, "I am satisfied with the friendships I have." A TR student stated, "I have great social interactions with peers and great friendships formed."

## Diverse Citizenship

Diverse citizenship refers to an openness of valuing differences, and active involvement with others to make the world a better place. Thriving students are open to diverse viewpoints and believe that it is their responsibility to contribute a positive difference to the community around them.

Item	Fall 2019	Winter 2020	Fall 2020	Winter 2021
My knowledge or opinions have been influenced or changed by becoming more aware of the perspective of individuals from different backgrounds	CLS 89.1% OT 95.6% TR 80%	CLS 100% OT 100% TR 85%	CLS 100% OT 100% TR 92%	CLS 100% OT 100% TR 100%
I value interacting with people whose viewpoints are different from my own	CLS 89.5% OT 95.5% TR 95%	CLS 100% OT 93.4% TR 95%	CLS 90% OT 96%	CLS 100% OT 90.6%

## TABLE 5DIVERSE CITIZENSHIP

			TR 100%	TR 94.1%
It is important to become aware of the perspectives of individuals from different backgrounds.	CLS 100% OT 100% TR 100%	CLS 100% OT 100% TR 85%	CLS 100% OT 100% TR 100%	CLS 100% OT 100% TR 100%

Results in Table 5 show that agreement with statements regarding diverse citizenship were high in Fall 2019 at 93.8% and increased in Winter 2020 (95.3%), Fall 2020 (97.5%), and Winter 2021 (98.3%). It is reasonable to assume that the increase in agreement was due to students responding to the unrest in the country and the demands for social and human rights. Indeed, many students reported participating in the protests of the murder of George Floyd.

### **Intrapersonal Thriving**

Intrapersonal thriving is reflected in the positive way of viewing the world and the future.

### Positive Perspective

Positive perspective represents the way in which students view life. This factor encompasses optimism and an expectation of positive outcomes. When students have a positive perspective, they view the world and their future with confidence; they expect good things to happen and recover more quickly from negative events by reframing them as learning experiences.

Item	Fall 2019	Winter 2020	Fall 2020	Winter 2021
The glass is "half full" rather than "half empty."	CLS 73.6% OT 82.2% TR 90%	CLS 92.2% OT 80% TR 65%	CLS 90% OT 80% TR 77%	CLS 100% OT 84.4% TR 82.4%
Look for the best in situations even when things seem hopeless.	CLS 100% OT 91.1% TR 95%	CLS 100% OT 91.1% TR 95%	CLS 90% OT 88% TR 91%	CLS 75% OT 93.7% TR 88.3%

## TABLE 6POSITIVE PERSPECTIVE

Results in Table 6 show that overall 83% of students agreed with the statement that they view the glass as half full versus half empty. Among CLS students agreement with this statement increased from 73.6% in Fall 2019 to 100% in Winter 2021. Agreement among OT averaged 81.6% with the highest level of agreement in Winter 2021 (84.4%). In Fall 2019 90% of TR students agreed with this statement; this number dropped to 65% in Winter 2020, which was the lowest for all three programs and across all four semesters.

Most students across all three programs agreed with the statement, "I look for the best in situations even when things seem hopeless" (CLS 91.1%, OT 90.9%, TR 92.3%). CLS (75%) and TR (88.3%) had the lowest level of agreement with this statement in Winter 2021. OT had the lowest level of agreement in Fall 2020 (88%). The following quote from one student sums up how having a positive perspective can

impact a person's outlook, "Perhaps all of the changes that occurred this semester will have helped us to better adapt and be ready for anything in the future because life will always throw us unforeseen situations."

#### Psychological Sense of Community

Psychological sense of community refers to the collective experience rather than individual. Sense of belonging or membership in a community contributes to feelings of ownership, being valued, enhances emotional connections with community members and increases the desire to make a contribution to the community. Psychological sense of community makes the greatest contribution to students thriving and is the single best way to help all students thrive (Schreiner, 2013).

Item	Fall 2019	Winter 2020	Fall 2020	Winter 2021
Feel a sense of belonging in the program	CLS 94.7% OT 89% TR 97.5%	CLS 92.2% OT 100% TR 85%	CLS 90% OT 92% TR 100%	CLS 75% OT 93.7% TR 94.1%
I feel proud of the program I have chosen to attend.	CLS 100% OT 91.1% TR 97.5%	CLS 100% OT 95.5% TR 100%	CLS 90% OT 80% TR 84%	CLS 75% OT 81.3% TR 100%
There a strong sense of community among students in this program	CLS 78.6% OT 84.5% TR 100%	CLS 69.1% OT 93.3% TR 100%	CLS 60% OT 80% TR 76%	CLS 37.5% OT 87.5% TR 76.5%

 TABLE 7

 PSYCHOLOGICAL SENSE OF COMMUNITY

Results in Table 7 show that an average of 91.9% of students across the three programs agree with the statement, "I feel a sense of belonging in the program." Feeling a sense of belonging reached a high of 100% in Winter 2020 for OT students and in Fall 2020 for TR students. The lowest level of agreement with this statement was by CLS students (75%) in Winter 2021. Agreement with the statement that there is a strong sense of community in the program decreased across the four semesters in CLS (78.6%, 69.1%, 60%, and 37.5%) and TR (100%, 100%, 76%, and 76.5%). The numbers for OT fluctuated with a high in Winter 2020 (93.3%) and a low in Fall 2020 (80%). A comment from a CLS student sums up not feeling part of a community; "it's hard to get help from classmates when you don't know who they are." The closure of campus affected students sense of community as reflected in this statement, "I feel I would be consistently thriving if COVID-19 wouldn't have shut down the campus, I am missing out on a lot of learning for a neuroanatomy lecture & lab course, also missing out on any on campus community activities and time to bond with classmates."

Finally, agreement with the statement, "I feel proud of the program" decreased for CLS (100%, 100%, 90%, and 75%) and OT (91.1%, 95.5%, 80%, and 81.3%). Results show a decrease in agreement with this

statement for TR students in Fall 2020 (84%) but in the other semesters all or almost all TR students agreed with this statement (97.5%, 100%, and 100%).

#### Institutional Integrity

Institutional Integrity is defined as the level to which the institution fulfills its mission and goals.

Item	Fall 2019	Winter 2020	Fall 2020	Winter 2021
My experiences in this program so far have met my expectations.	CLS 84.7% OT 80% TR 97.5%	CLS 92.2% OT 75.6% TR 95%	CLS 90% OT 68% TR 77%	CLS 75% OT 81.4% TR 88.2%
The program was accurately portrayed during the admissions process.	CLS 63.3% OT 77.8% TR 82.5%	CLS 76.8% OT 86.7% TR 95%	CLS 90% OT 64% TR 75%	CLS 75% OT 84.3% TR 94.1%
The actions of faculty, staff, and administrators of the program are consistent with the mission of the program.	CLS 100% OT 84.5% TR 92.5%	CLS 100% OT 82.2% TR 100%	CLS 90% OT 80% TR 100%	CLS 75% OT 87.5% TR 94.1%

# TABLE 8INSTITUTIONAL INTEGRITY

Results in Table 8 show that OT students had the lowest level of agreement with all statements about institutional integrity across all three programs and across all four semesters. The lowest level of agreement in OT occurred in Fall 2020 with an average across all three items of 70.6%; the highest occurred in Winter 2021 with an average of 84.4%. The lowest level of agreement for all questions for CLS was in Winter 2021 (75%) and highest was in Fall 2020 (90%). TR had the lowest level of agreement for all questions in Fall 2020 (84%) and highest in Winter 2020 (96.6%).

OT students shared their dissatisfaction with the program in the qualitative comments. Winter 2020 comments reflect dissatisfaction with multiple aspects of the program, "I have felt the program is very disorganized... I am not getting the most out of this experience. I feel like I have missed out on a lot of hands-on learning opportunities...there are little resources provided to us to help pay for graduate school. In Fall 2020 one student shared, "There is a lot of disconnect within the graduate program. There is little communication and organization between faculty and students." Another student expressed frustration with moving to online learning and concerns about finances, "There was also a lot of miscommunication with the adaptation of online courses. This pandemic has also made it very difficult for financial reasons."

## **QUALITATIVE THEMES**

Each qualitative response was analyzed and coded, as explained in the methodology section. Responses were placed into two main categories; barriers to students' thriving and support to students' thriving. Barriers and supports to student thriving were grouped by the thriving domains. Any barrier or support that was outside of the thriving domains were categorized as "other stressor." Table 9 presents the most common barriers and supports by semester.

Semester/Year	Barriers to Thriving	Supports to Thriving
Fall 2019	<ol> <li>Juggling demands</li> <li>Finances</li> <li>Mental health</li> <li>Issues in a particular class</li> <li>Social isolation</li> </ol>	<ol> <li>Being academically engage</li> <li>Being socially engaged</li> <li>Getting good grades (undergrad)</li> <li>Understanding content (grad)</li> <li>Good health</li> </ol>
Winter 2020	<ol> <li>Covid</li> <li>Online learning</li> <li>Social isolation</li> <li>Juggling demands/workload</li> <li>Health</li> <li>Finances</li> </ol>	<ol> <li>Getting good grades</li> <li>Maintaining social relationships (peers and faculty)</li> <li>Feeling supported</li> <li>Having health</li> <li>Having balance</li> </ol>
Fall 2020	<ol> <li>Online learning</li> <li>Covid</li> <li>Social isolation</li> <li>Lack of communication with faculty/uncertain expectations</li> <li>Juggling demands</li> <li>Finances</li> <li>Mental health</li> </ol>	<ol> <li>Getting good grades</li> <li>Support from family and friends</li> <li>Participating in class</li> </ol>
Winter 2021	<ol> <li>Online learning</li> <li>Social isolation</li> <li>Covid</li> <li>Balancing responsibilities</li> <li>Finances</li> </ol>	<ol> <li>Online learning</li> <li>Time for self-care (grad)</li> <li>Focusing on school</li> </ol>

TABLE 9BARRIERS AND SUPPORTS TO STUDENT THRIVING

Online learning was listed as one of the top barriers to thriving in the three semesters during the pandemic. Lack of communication with faculty/uncertain expectations within the online environment were also barriers. Despite challenges with online learning, in Winter 2021 online learning was listed as the number one support for thriving; allowing students the flexibility to be with their family or providing them time to self-reflect and prioritize self care. One student shared, "The pandemic has given me time to re-evaluate my life and it has inspired me to go back to school. Taking online classes has improved my mental

health as it has given me a purpose in life," while another stated, "I like the online format. It is helpful to do class from home when you have a family."

Although juggling demands and balancing responsibilities was a barrier to thriving in all four semesters it dropped from the number one reason in Fall 2019 to the fourth and fifth most common barrier in the other semesters. Increased ability to juggle demands was also reflected in the survey results. Online learning, despite its challenges, may have contributed to the increased ability of students to juggle demands.

Academic achievement was a support to students' thriving. Being able to get good grades and understanding content contributed to students thriving in Fall 2019, Winter 2020 and Fall 2020. In addition, being engaged, participating in class and focusing on school were top supports to students' thriving across semesters.

A significant barrier to students' thriving was social isolation which was listed as a top barrier in all four semesters. In Fall 2019, it was listed fifth. Not surprisingly, given the restrictions due to the pandemic, it moved to second in Winter 2021. Although Covid-19 was often used as a catch-all for many of the stressors experienced by students, it was frequently used when discussing feelings of social isolation. Despite the public health restrictions some students were able to remain socially engaged and supported by family and friends which contributed to their thriving as noted in Winter 2020 and Fall 2020.

#### **Other Barriers to Thriving**

Other factors that affected students' thriving and did not fit within the thriving domains include, mental and/or physical health, finances, and Covid-19 or the pandemic. Not surprisingly, Covid-19 appeared as the number one barrier to thriving in Winter 2020. Winter 2020's semester started off like any other semester but in February, the World Health Organization declared a pandemic and by mid-March, campus shut down and classes abruptly shifted to online. As students and the entire world adjusted to living in the pandemic, the ranking of Covid-19 as a barrier to thriving dropped in Fall 2020 and Winter 2021 (number two and three respectively).

Finances were a consistent barrier to thriving and appeared as the second most common barrier to thriving in Fall 2019. Finances remained in the 6th spot in Winter 2020 and Fall 2020 and the 5th in Winter 2021. Mental and physical health was identified as a barrier in Fall 2019, Winter 2020, and Fall 2020. It ranked third in Fall 2019 and dropped to seventh in Fall 2020. Even though mental and physical health was listed as a barrier, in Fall 2019 students mentioned that having good mental and physical health was important to them and was a contributing factor to their thriving.

Fall 2020 was a particularly difficult semester for students. The least amount of positive factors were listed by students in the qualitative comments. This semester also had some of the lowest numbers on items in the survey. The semester began with face-to-face classes and then changed to online learning. In addition to the uncertainty and changes within the classroom there was a lot of uncertainty regarding clinical activities and potential delays in graduation.

### DISCUSSION

Covid-19 did not cause the cracks we see in so many areas of society, it has exposed them. Similarly, the results of this study reveal where the cracks are in students' thriving. The survey data and the qualitative data provides insight about the areas in which students were thriving before and during the pandemic. From Fall 2019 to Winter 2021 students' level of thriving shifted more towards surviving but the areas in which they struggled remained consistent. The results give us clues about where we should focus interventions to increase the thriving of all students as we move into the Covid-19 recovery period and the new normal.

Students who participated in face to face classes were frustrated by the abrupt shift to online learning. Hodges et al. (2020) have referred to this as emergency remote teaching, which does not meet the standards of high quality online learning. Online classes and virtual clinical activities were not what students in our face-to-face programs chose; disrupting expectations of their education and upending their experience of higher education. Quantitative and qualitative data from our study suggests that, despite the disruption and dissatisfaction, students in our professional programs continued to thrive academically. This contrasts with the findings of a study by Parker et al. (2021) which studied students' perceptions of forced transition to remote learning and found that graduate and undergraduate students interviewed mentioned their lack of engagement, motivation, and accountability when they left campus to learn at home. Students in our study were able to maintain their engagement in their learning and experienced a high level of academic determination throughout the pandemic. Students viewed engagement in their learning as a support to thriving. Clarity in terms of their long-term educational goal; becoming members of CLS, OT, and TR consistently supports the academic thriving of students in our programs.

Although it was difficult for students to transition to online learning it was not entirely negative. Learning remotely is convenient for students (Branquinho et al., 2020). Some students in our study found online learning to be a positive experience and a factor that supported their thriving. For a commuter campus, not having to drive to campus and find parking frees up time to engage in school work and complete other tasks at home, making it easier for students to juggle demands. Another factor that may have played a role in the increased ability to juggle demands is a decrease in the number of hours worked. In Fall 2019 most students reported working. Because of Covid-19 work hours decreased, leaving more time for students to focus on other areas of college life. However, a decrease in work hours may have increased financial stress. Especially for OT students who received less financial support.

Since all areas of thriving are malleable, faculty can have a significant impact on academic thriving. Finding ways to increase ability to juggle demands has implications for how we structure our curriculum. There is an opportunity to re-evaluate when students need to be on campus. Learning is a process and students require the resource of time to actively and continuously engage in their own learning. There are several ways academic programs and institutions can intervene in students' time resources. We can carefully plan and schedule academic and extracurricular activities, take into account aspects such as requirements regarding attendance in classes, physical distances between learning spaces, time between scheduled classes, create flexible schedules for learning, and create flexible hours for clinical activities (Truta et al., 2018).

We can further boost academic thriving, enhance students' commitment to their educational goals, expand their connections with the profession, and increase engagement with content by personalizing their education. We can create opportunities for students to explore areas of personal preference and interest by allowing students to design assignments, choose topic areas to explore, and select fieldwork sites. Additionally, we can facilitate early and frequent contact between students and clinicians, and practice settings (Truta et al., 2018).

We want students to be resilient clinicians, able to cope with the stresses of dynamic work environments. However, resilience is not just an individual trait but depends on the environment. We should be creating learning environments that are flexible and help students meet multiple demands with a goal of entering the profession in a state of wellness versus being overwhelmed and burned out. Resiliency courses within the curriculum can help (Chandler et al., 2019). Nandy et al. (2021) has also proposed the adoption of a resilience model for institutions. This model, in essence, is a guide to help higher education institutions recover from the impact of Covid-19.

We may need to rethink resilience. Students who are not coping well are not less resilient; they may be going through more than other students. Ideally, we want to see all students consistently thriving and in order to accomplish this goal we may need to approach the 10.5% of students that are barely surviving or not even surviving with more empathy, compassion and individualized interventions such as personalized advising, creating online communities, supporting social connectedness, and referring to mental health services.

Advising is one way we can reach individual students. Advising is a recognized high impact strategy that positively impacts student success (Antoney, 2020; Darling, 2015), is closely intertwined with student learning outcomes (Mu. & Fosnacht, 2018), and may be the most underestimated characteristic of a successful college experience (Light, 2001). Effective advising has been found to provide students with long-lasting impacts beyond graduation rates (Farrington et al., 2012; Mu & Fosnacht, 2018). The positive

impacts of advising can include increases in emotional-well being, persistence, and positive mind-sets (Farrington et al., 2012).

There are multiple advising approaches that can be followed (prescriptive, proactive, strength-based, developmental, etc.) (Kelly, 2018). Soria et.al. (2017) looked at the impacts on first year students when they participated in strength-based advising. Results showed that those students were more likely to graduate, had a higher level of self-awareness, self-confidence and self-efficacy; and were more engaged academically and socially (p. 62). Advising commuter students should not only assist the student in navigating course curriculum and degree path, but encourage and connect students to student life programs and other resources that would enrich their college experience and help them to feel more connected to the campus community (Darling, 2015, p. 92). Additionally, a meta-analysis of faculty-to-student mentoring showed that mentoring increased the chances that a student graduates (Sneyers & DeWitte, 2018).

During the pandemic, the ability to make friends decreased and loneliness increased. Research by Bu et al., (2020) and Rauschenberg et al., (2020) estimated that at least 38% to 50% of young people aged 18-24 years old experienced higher levels of loneliness during the mandatory lockdown with women having higher odds of experiencing loneliness than men (Losada-Baltar et al., 2020; Salo et al., 2020). Their findings are consistent with the results of the current study. The higher odds of women experiencing loneliness is of particular concern in our programs which are almost 90% female. Results show that social connectedness and loneliness are a consistent issue for students, and needs to be considered when planning student and faculty interactions.

Students view connectedness as an overlapping network of old, new, and different friends, as well as other students and faculty. Students connect both socially and institutionally through personal relationships. Thai et.al. (2019) suggests faculty can positively facilitate connectedness among students through an academic relationship, but their influence may not extend to students' social connectedness with old and new friends. Interactions between instructors and students aged 21-25 should be encouraged and prioritized. Jorgenson et al. (2018 found that this relationship fosters student connectedness when relationships with other students are not as effective. Flexibility within programs may increase time for connections with family and old friends.

A lack of connectedness in online and remote learning environments is a concern (Wells and Dellinger, 2011). The more students perceive themselves as personally isolated, the less satisfied they generally are with web-based course work (Billings et al., 2001). Continuing to use the online learning environment requires that we harness the potential of online learning to support social connections. As we move away from emergency remote teaching we need to recognize and capitalize on the advantages that online communication provides. Smith et al. (2017) identified several ways in which online learning can support social connections including; increased social agency (students can choose more people to be involved with especially in a cohort which may be cliquey), socially egalitarian (equal opportunity for students to share thoughts and ideas), time for reasoned responses, and opportunities to demonstrate verbal/written proficiency.

Researchers have identified that creating online communities in online learning environments positively impacts students' sense of connectedness with each other and faculty (Liu, X. et.al., 2007). Being socially engaged with students and faculty was consistently a support to student thriving as shown in Table 9. Strategies to increase feelings of connectedness include cooperative and small group assignments (Brandl et. al., 2017; Liu X. et.al, 2007); even using social media platforms is a way to increase communication between students (Thai et.al., 2019).

Strengthening personal relationships with faculty, other students and campus employees may increase institutional connectedness and positively affect students' perceptions of institutional integrity. In general, colleges and universities should note that any interaction between a student and any campus employee plays a role in connectedness. Although the pandemic disrupted learning, it is incumbent upon programs to explore students' expectations. Until we learn more about what students expect and when and where programs are being misrepresented we will continue to be unable to meet the expectations of students.

#### LIMITATIONS

There are several limitations of this study. Only 40% of students completed the survey which may not be representative of the views of all students. Bias in responses may include; students who did not complete the survey may have been too overwhelmed, or they felt they are thriving and did not connect with the topic; students who completed the survey may have been enthusiastic about their experiences, or may have been extremely dissatisfied with their experiences. The study is limited to three health professions programs limiting generalizability to other health professions programs. Although students in each program and within a program had similar experiences, cohort differences arise from the particular experiences of a unique group of people.

#### CONCLUSION

Although students' overall level of thriving shifted to more students surviving, the support (being academically & socially engaged, good health, feeling supported) that affected their thriving remained fairly consistent across the four semesters. There are opportunities to increase students' thriving in all areas; it is especially important that we attend to the areas that are consistently an issue such as loneliness, sense of belonging, and juggling demands of college life. Some students seemed to adapt to the shift to online learning and remained flexible. These students demonstrated the kind of resilience we hope to develop in all students. The pandemic will pass; it will be time to stop hiding behind the excuse that the pandemic is to blame for poor student thriving and poor faculty instruction. We do not want the social isolation that was enhanced by the pandemic and the struggle to meet multiple demands to continue to affect students' thriving.

Areas of future research should include a more in-depth exploration of targeted interventions to move students from "surviving" to 'thriving," and to keep students thriving, including varying pedagogical approaches such as continuing online learning. Institutional integrity could benefit from having a more in depth investigation. Faculty attitudes surrounding advising/advising styles and its impact on how best to support student thriving should also be considered in future research. Measuring faculty thriving using a similar instrument could illuminate its relationship to student thriving and success. This research could be expanded to other professional and nonprofessional programs.

#### REFERENCES

- Active Minds. (2020). *Student Mental Health Survey September 2020*. Activeminds.org. Retrieved from https://www.activeminds.org/press-releases/active-minds-and-association-of-college-and-university-educators-release-guide-on-practical-approaches-for-supporting-student-wellbeing-and-mental-health-copy/
- Alemany-Arrebola, I., Rojas-Ruiz, G., Granda-Vera, J., & Mingorance-Estrada, Á.C. (2020). Influence of COVID-19 on the perception of academic self-efficacy, state anxiety, and trait anxiety in college students. *Frontiers in Psychology*, 11, Article 570017. https://doi.org/10.3389/fpsyg.2020.570017
- Antoney, L. (2020). Academic advising: A Conceptual integration of advising models and approaches. *International Journal of Education*, 2(2), 9–20. Retrieved from http://www.iaeme.com/IJE/issues.asp?JType=IJE&VType=2&IType=2
- Billings, D., Connors, H., & Skiba, D. (2001). Benchmarking best practices in web-based nursing courses. *Advanced Nursing Science*, 23(3), 41–52.
- Brandl, K., Schneid, S.D., Smith S., Winegarden B., Mandel J., & Kelly C. (2017). Small group activities within academic communities improve the connectedness of students and faculty. *Medical Teacher*, 39(8), 813–819. https://doi.org/10.1080/0142159X.2017.1317728
- Branquinho, C., Kelly, C., Arevalo, L., Santos, A., & Gaspar de Matos, M. (2020). Hey we also have something to say: A qualitative study of Portuguese adolescents' and young people's experiences under covid-19. *Journal of Community Psychology*, *48*, 2740–2752.

- Bu, F., Steptoe, A., & Fancourt, D. (2020). Loneliness during lockdown: Trajectories and predictors during the COVID-19 pandemic in 35,712 adults in the UK. medRxiv. doi.org/10.1101/2020.05.29.20116657
- Byrnes, Y.M., Civantos, A.M., Go, B.C., McWilliams, T.L., & Rajasekaran, K. (2020). Effect of the COVID-19 pandemic on medical student career perceptions: A national survey study. *Medical Education Online*, 25(1). https://doi.10.1080/10872981.2020.1798088
- Carolan, C., Davies, C.L., Crookes, P., McGhee, S., & Roxburgh, M. (2020). COVID 19: Disruptive impacts and transformative opportunities in undergraduate nurse education. *Nurse Education in Practice*, 46. https://doi.org/10.1016/j.nepr.2020.102807
- Chandler, G., Kalmakis, K., Chlodos, L., & Helling, J. (2019). The Efficacy of a resilience intervention among diverse, at-risk, college athletes: a mixed-methods study. *Journal of the American Psychiatric Nurses Association*, 26(3). https://doi.org/10.1177/1078390319886923
- Chang, J., Ji, Y., Li, Y., Pan, H., & Su, P. (2021). Prevalence of anxiety symptom and depressive symptom among college students in Covid-19 pandemic: A meta-analysis. *Journal of Affective Disorders*, 292(1), 242–254. https://doi.org/10.1016/j.jad.2021.05.109
- Darling, R. (2015). Creating an institutional academic advising culture that supports commuter students. *New Directions for Student Success*, 2015(150), 87–96. https://doi.org/10.1002/ss.20130
- Farrington, C.A., Roderick, M., Allensworth, E., Nagaoka, J., Keyes T.S., Johnson, D.W., & Beechum, N.O. (2012). *Teaching adolescents to become learners. The role of noncognitive factors in shaping school performance: A critical literature review*. University of Chicago Consortium on Chicago School Research.
- Fogg, N., Wilson, C., Trinka, M., Campbell, R., Thomson, A., Merritt, L., . . . Prior, M. (2020). Transitioning from direct care to virtual clinical experiences during the COVID-19 pandemic. *Journal of Professional Nursing: Official Journal of the American Association of Colleges of Nursing*, 36(6), 685–691. https://doi.org/10.1016/j.profnurs.2020.09.012
- Healthy Minds Network & American College Health Association (2020). *The impact of COVID-19 on college student well-being*. Retrieved from https://healthymindsnetwork.org/hms/
- Heilferty, C., Phillips, L., & Mathios, R. (2021). Letters from the pandemic: Nursing students narrative of change, challenges and thriving at the outset of COVID-19. *Journal of Advanced Nursing*, 77(8), 3436–3445. https://doi:10.1111/jan.14862
- IRIM databook. (2019). Retrieved from https://irim.emich.edu/datafiles/pdf/EMUDatabook\_2019\_v1.pdf
- Jorgensen, D., Farrel, L., Fudge, J., & Pritchard, A. (2018). *Journal of the Scholarship of Teaching and Learning*, *18*(1), 75–95. doi: 10.14434/josotl.v18i1.22371
- Kelly, J. (2018). Academic Advising Approaches. [NACADA powerpoint slides]. Retrieved from https://www.nacada.ksu.edu/Portals/0/Events/SummerInst/2018/PowerPoints/T11-AdvApproach-JK%20-%20PPT.pdf
- Light, R.J. (2001). *Making the most of college: Students speak their minds*. Cambridge, MA: Harvard University Press.
- Liu, X., Magjuka, R., Bonk, C.J., & Seung-hee, L. (2007). Does sense of community matter? An Examination of participants' perceptions of building learning communities in online courses. *Quarterly Review of Distance Education*, 8(1), 9–24.
- Losada-Baltar, A., Márquez-González, M., Jiménez-Gonzalo, L., Pedroso-Chaparro, M.D.S., Gallego Alberto, L., & Fernandes-Pires, J. (2020). Differences in anxiety, sadness, loneliness and comorbid anxiety and sadness as a function of age and self-perceptions of aging during the lockout period due to COVID19. *Spanish Journal of Geriatrics and Gerontology*, 55(5), 272–278. doi.org/10.1016/j.regg.2020.05.005
- Mu, L., & Fosnacht, K. (2018). Effective Advising: How academic advising influences student learning outcomes in different institutional contexts. *The Review of Higher Education*, 42(4), 1283–1307. doi:10.1353/rhe.2019.0066
- Nandy, M., Lodh, S., & Tang, A. (2021). Lessons from COVID-19 and a resilience model for higher education. *Industry and Higher Education*, 35(1), 3–9. https://doi.org/10.1177/0950422220962696

- Pandit, N.R. (1996). The creation of theory: A recent application of the grounded theory method. *The Qualitative Report*, 2, 1–15. DOI:10.46743/2160-3715/1996.2054
- Parker, S., Hansen, M., & Bernadowski, C. (2021) COVID-19 campus closures in the United States: American student perceptions of forced transition to remote learning. *Social Sciences*, *10*(62). https://doi.org/10.3390/socsci10020062
- Ramos-Morcillo, A., Leal-Costa, C., Moral-Garcia, J., & Ruzafa-Martinez, M. (2020). Experiences of nursing students during the abrupt change from face-to-face to e-learning education during the first month of confinement due to Covid-19 in Spain. *International Journal of Environmental Research and Public Health*, 17(15), 5519. https://DOI: 10.3390/ijerph17155519
- Rauschenberg, C., Schick, A., Goetzl C., Roehr, S., Riedel-Heller, S.G., Koppe, G., . . . Reininghaus, U. (2021). Social isolation, mental health, and use of digital interventions in youth during the COVID-19 pandemic: A nationally representative survey. *European Psychiatry*, 64(1), E20, 1–16. https://doi.org/10.1192/j.eurpsy.2021.17
- Richardson, M.A., Islam, W., & Magruder, M. (2020). The Evolving Impact of COVID-19 on Medical Student Orthopedic Education: Perspectives from Medical Students in Different Phases of the Curriculum. *Geriatric Orthopaedic Surgery & Rehabilitation*, 11. https://doi.org/10.1177/2151459320951721
- Saldana, J. (2013). The Coding manual for qualitative researchers (2ed.) Sage.
- Salo, A.E., Junttila, N., & Vauras, M. (2020). Social and emotional loneliness: Longitudinal stability, interdependence, and intergenerational transmission among boys and girls. *Family Relations*, 69(1), 151–165.
- Schreiner, L.A. (2010). Thriving in community. About Campus, 15(4), 2–11.
- Schreiner, L.A. (2013). Thriving in College. New Directions for Student Services, 143(2013). https://DOI:10.1002/ss.20059
- Seligman, M. (2011). Flourish: a visionary new understanding of happiness and well-being. Free Press.
- Smith, E.B., Boscak, A., Friedman, E.M., Frand, S., Deitte, L.A., Benefield, T., & Jordan, S. (2020). Radiology medical student education 2020: surveys of the alliance of medical student educators in radiology and medical students. *Academic Radiology*. https://doi.org/10.1016/j.acra.2021.01.003
- Smith, S.U., Hayes, S., & Shea, P. (2017). A critical review of the use of Wenger's Community of Practice (CoP) theoretical framework in online and blended learning research, 2000–2014. Online Learning, 21(1), 209–237. Doi:10.24059/olj.v21i1.963
- Sneyers, E., & DeWitte, K. (2018). Interventions in higher education and their effect on student success: A meta-analysis. *Educational Review*, 70(2), 208–228. DOI:10.1080/00131911.2017.1300874
- Son, C., Sudeep, H., Alec, S., Xiaomei, W., & Farzan, S. (2020). Effects of COVID-19 on college students' mental health in the United States: Interview survey study. *Journal of Medical Internet Research*, (22). Article e21279. https://doi.org/10.2196/21279
- Soria, K.M., Laumer, N.L., Morrow, D.J., & Marttinen, G. (2017). Strength-based advising approaches: Benefits for first-year undergraduates. *NACADA Journal*, 37(2), 55–65. https://doi.org/10.12930/NACADA-16-010
- Sriram, R., & Vetter, D. (2012). *Thriving in transitions: A research-based approach to college student success*. National Resource Center for The First-Year Experience.
- Tagg, J. (2003). *The Learning Paradigm College*. Anker Publishing Company.
- Thai, M., Sheeran, N., & Cummings, D.J. (2019). We're all in this together: The impact of Facebook groups on social connectedness and other outcomes in higher education. *The Internet and Higher Education*, 40, 44–49. https://doi.org/10.1016/j.iheduc.2018.10.001
- Tokuç, B., & Varol, G. (2020). Medical education in Turkey in time of COVID-19. *Balkan Medical Journal*, *37*(4), 180–181. https://doi.org/10.4274/balkanmedj.galenos.2020.2020.4.003
- Truta, C., Parv, L., & Topala, I. (2018). Academic engagement and intention to drop Out: Levers for sustainability in higher education. *Sustainability*, 10(12), 4637. https://doi.org/10.3390/su10124637

- Wells, M.I., & Dellinger, A.B. (2011). The effect of type of learning environment on perceived learning among graduate nursing students. *Nursing Education Perspectives*, 32(6), 406–410.
- Woolliscroft, J.O. (2020). Innovation in response to the COVID-19 pandemic crisis. Academic Medicine: Journal of the Association of American Medical Colleges, 95(8), 1140–1142. https://doi.org/10.1097/ACM.00000000003402
- Yatczak, J., Mortier, T., & Silander, H. (2021). A study exploring student thriving in professional programs: Expanding our understanding of student success. *Journal of Higher Education Theory and Practice*, 21(1). https://doi.org/10.33423/jhetp.v21i1.4040