



COVID-19 Impact on Radiology Students' Distance Learning

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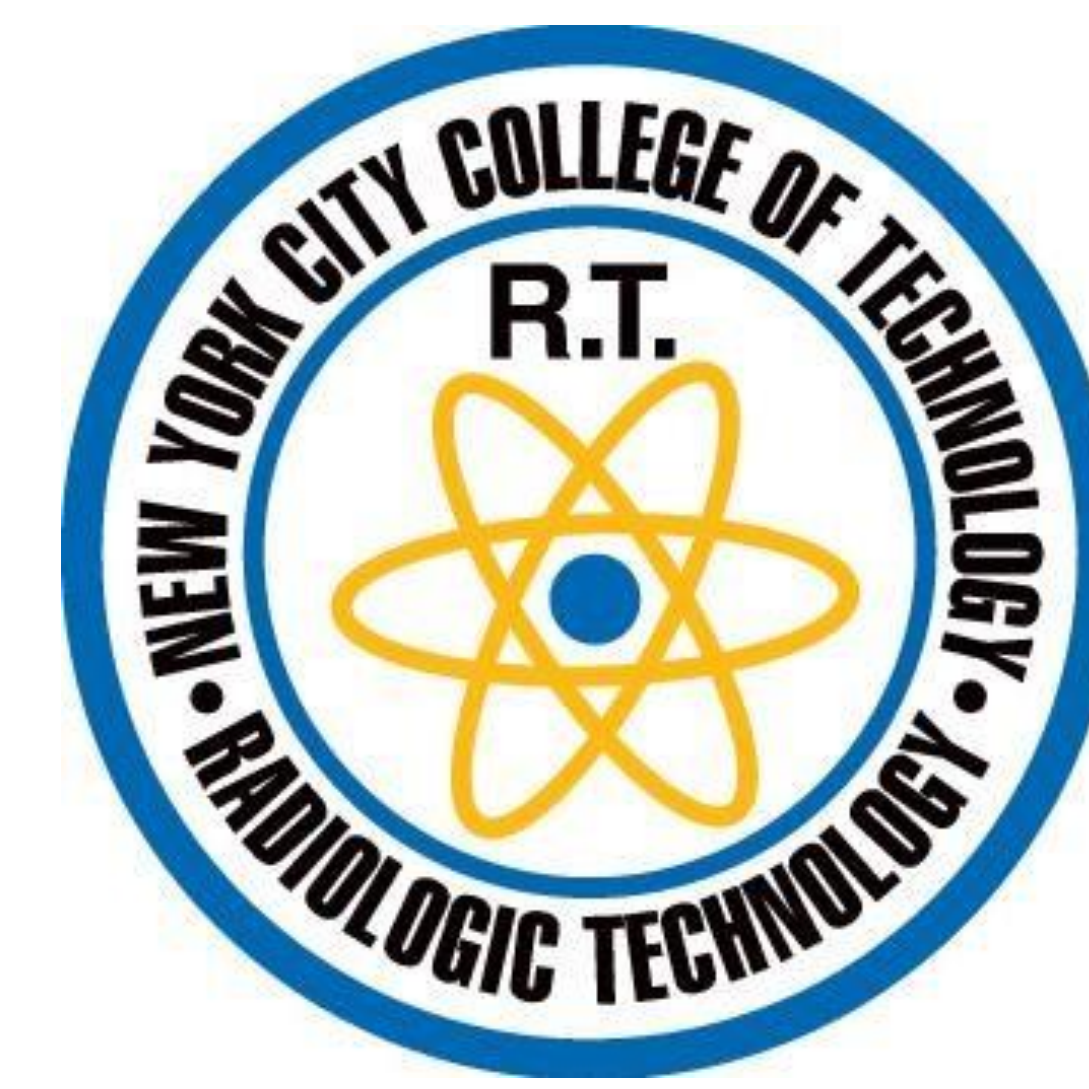
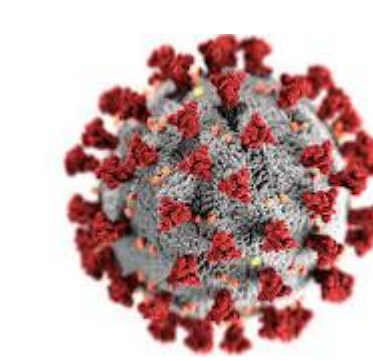
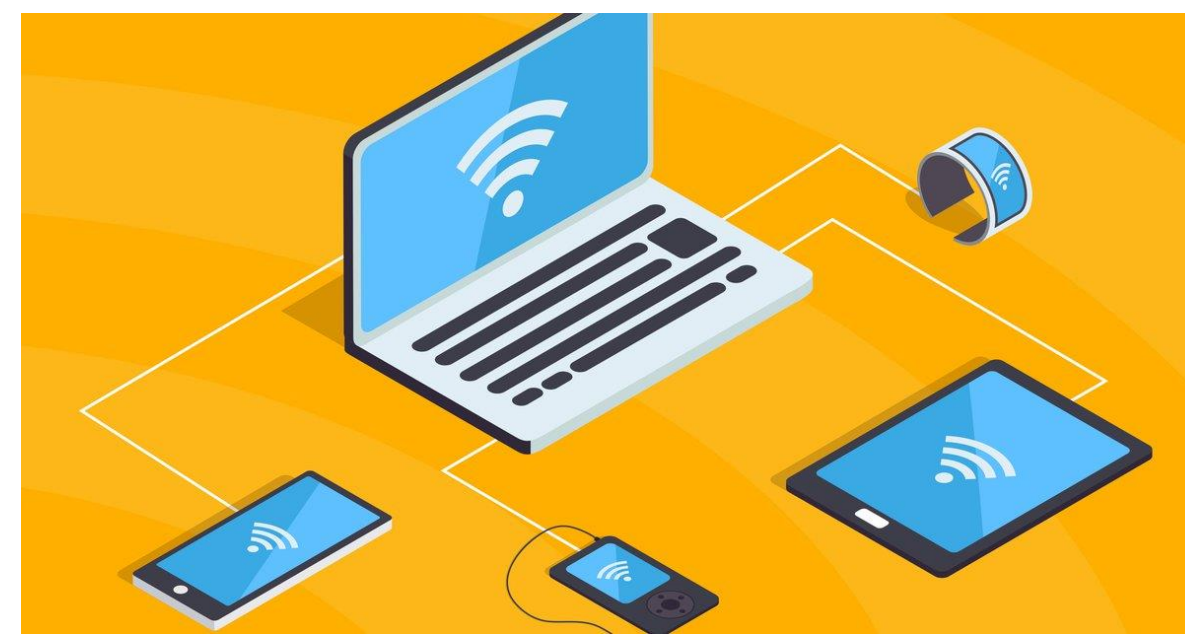
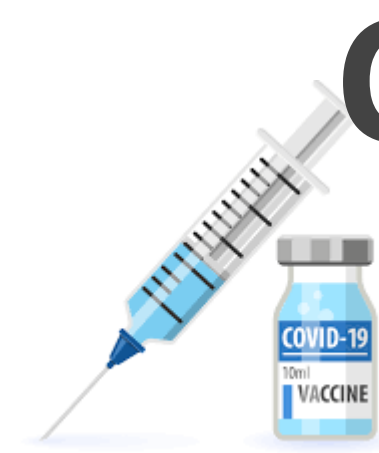
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Abstract

Radiologic Technology students are well into a full year of distance learning. The Juniors are utilizing a hybrid mode, where they continue to have laboratory classes on campus at half capacity and every other week. The Senior students are completely learning through distance learning and focusing their efforts on reviewing for their licensing exams. Both cohorts are in clinical rotation with COVID-19, a smaller threat to their schooling, but still a hazard that can impact their personal and educational lives. With the use of surveys that are distributed during online classes, we hope to evaluate how a full semester of distance learning impacted students. We also hope to evaluate Juniors on their clinical rotation experience and the Seniors that had to resume after a break from cancelled clinical rotations. Other factors we will measure include whether access to the COVID-19 vaccine will lessen the student's fear of becoming infected or does the continued threat change their minds about entering a health care field. We will continue to compare the emotional, mental, and physical well-being of the students over the course of the current school year. Changes in motivation, engagement and perception of success are critical changes with online instructional learning (Daniels, 2021). With the distribution of online surveys, we are continuing to evaluate the effects that distance learning has on both the first- and second-year students and compare how they are coping with distance learning, in addition to domestic and familial responsibilities of the students outside the classroom walls.

Introduction

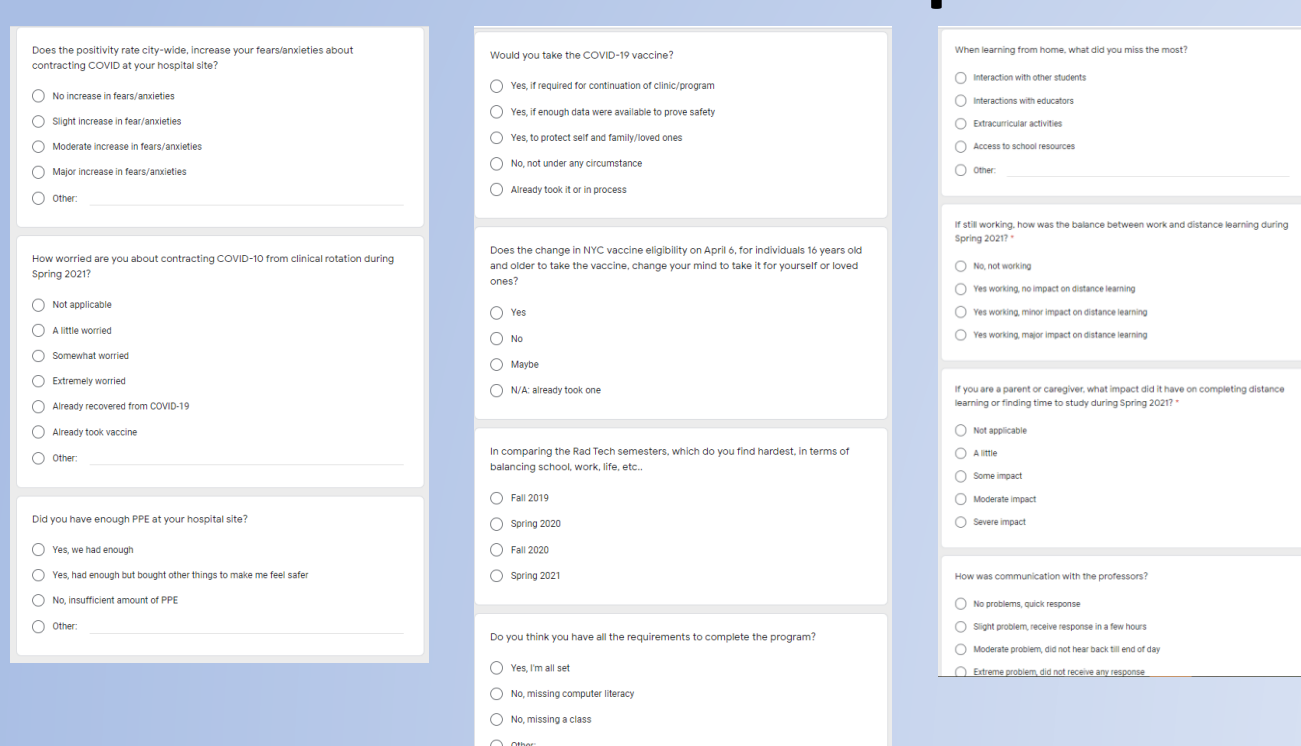
A year into the COVID-19 pandemic, normalcy seems to be a long way off. Education systems are continuing to adjust to the changing health crisis, while trying to adapt to evolving educational needs. The release of vaccines brings a glimmer of hope as by early April, any New York resident over the age of 16 is eligible, which would cover all the ages in the two Rad Tech cohorts (Covid-19, 2021). Will this change in eligibility, change students minds regarding obtaining the vaccine?

Radiologic Technology students have been utilizing distance learning for a full year. Motivation, didactic satisfaction, as well as balancing work and life all play a part in how well the students will perform academically, as well as clinically. The current Senior students will be slightly delayed in completing their combined didactic studies and clinical rotations. As of now, the Junior students are on track to complete their program in the regular time frame.

Methodology

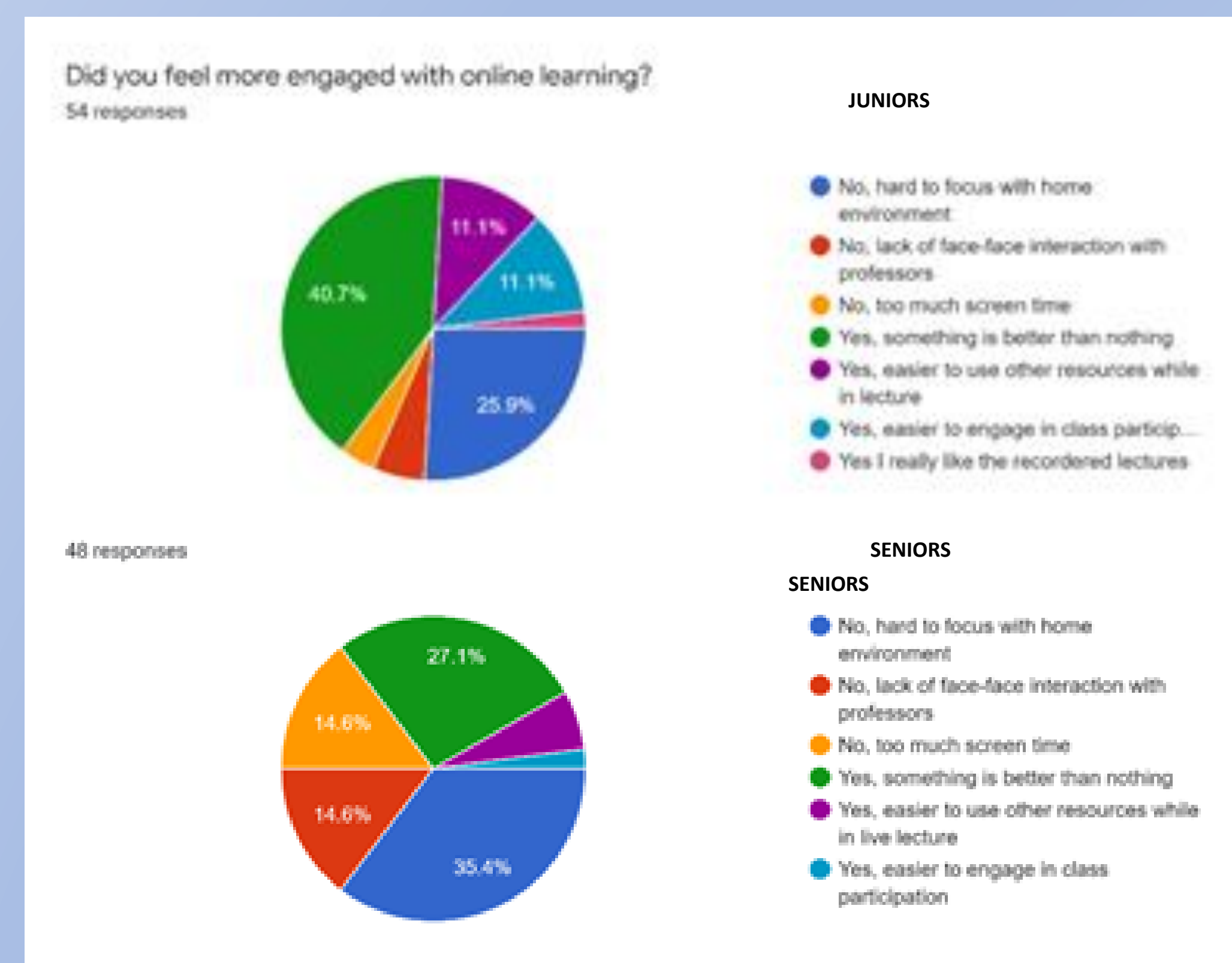
Junior and Senior radiological students took an online survey created on Google Forms, at the beginning of the Spring 2021 semester and another after mid-semester exams. A final survey will be sent to inquire about the end of the Spring semester and ask about how the Spring semester progressed with all the students in clinical rotations. The survey uses a Likert type scale to measure their concerns and thoughts with distance learning. Factors, such as being a caregiver, working status and specific motivation factors and issues were assessed per student cohort.

Images of the mid-semester surveys filled out by the students with questions varying based on the cohort and reflecting key concerns of the students, regarding DL and clinical rotations.

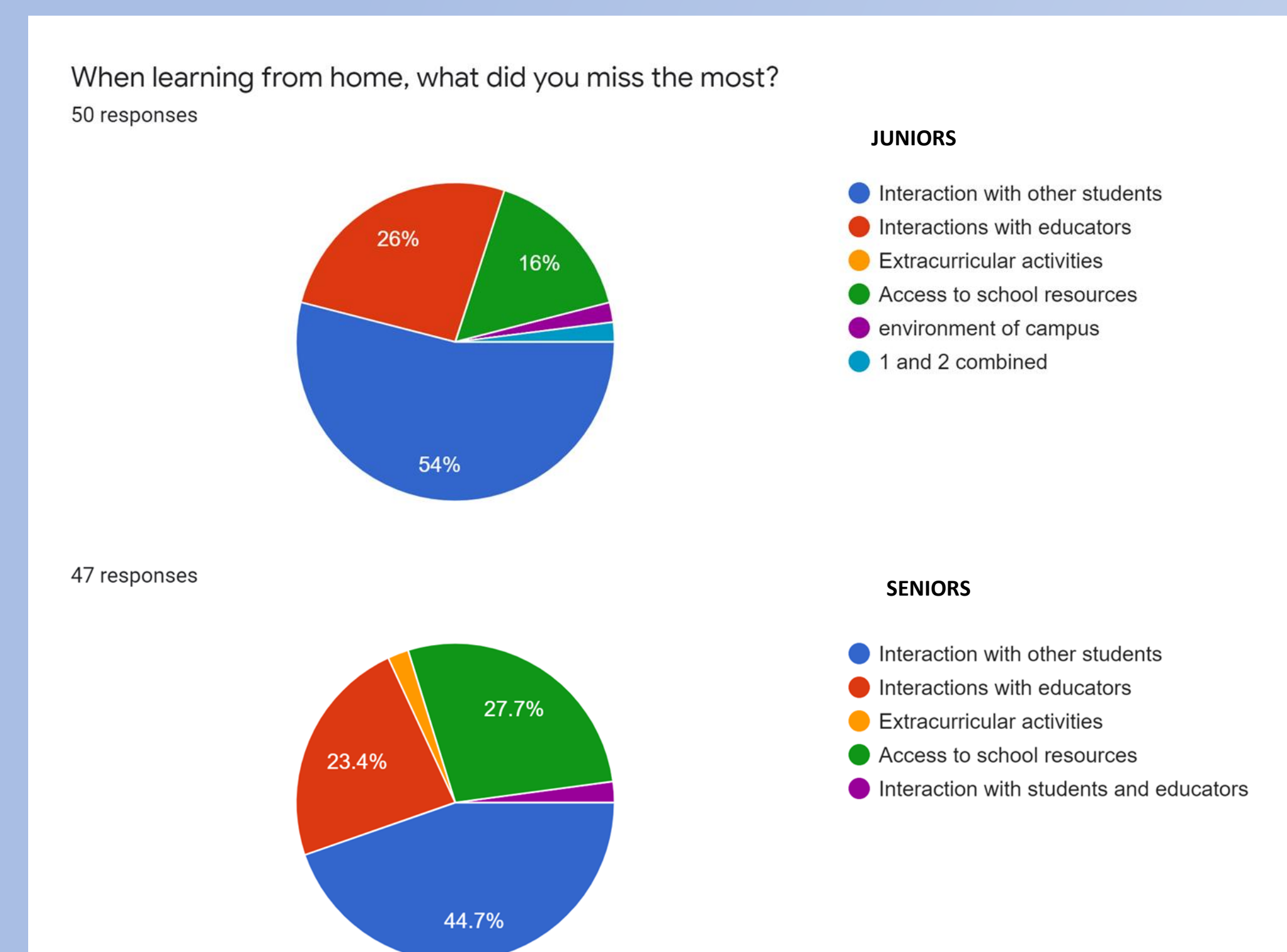


Results

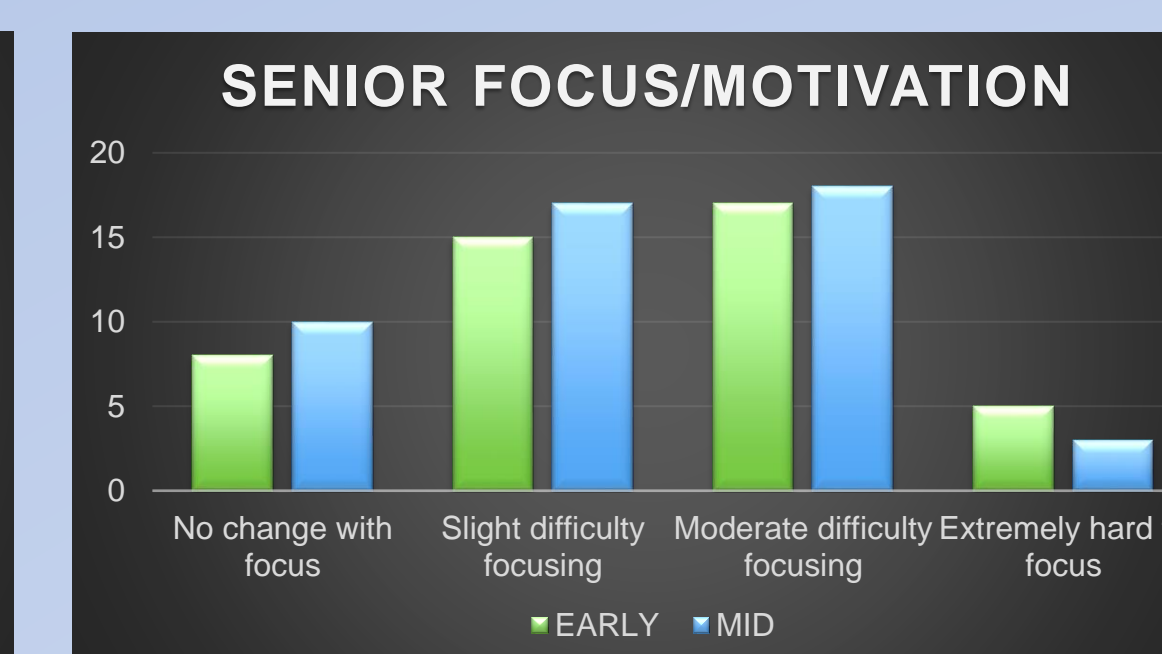
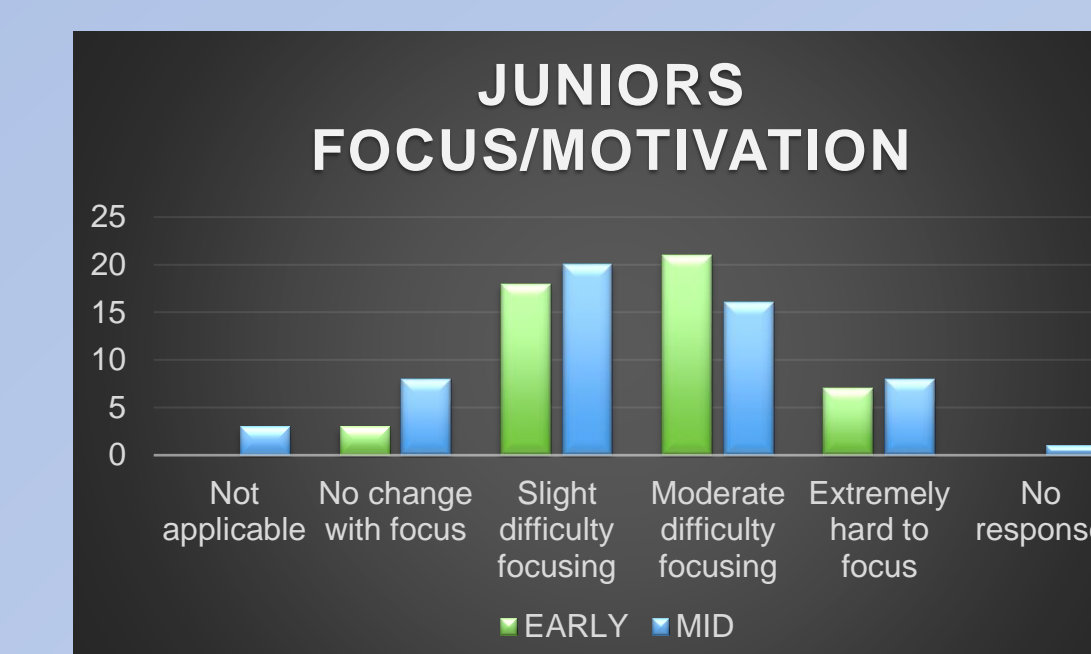
Numerical data is exported to Microsoft Excel for analysis. 1st survey: 75% completion out of 62 seniors and 84% out of 58 juniors. Mid-semester survey, 77% Senior completion and 96% for Junior completion. The Excel charts follow responses over the course of the Spring semester, as well as differences noted by 1st (Junior) and 2nd (Senior) year students. The pie charts reflect mid-semester survey responses from Google Forms.



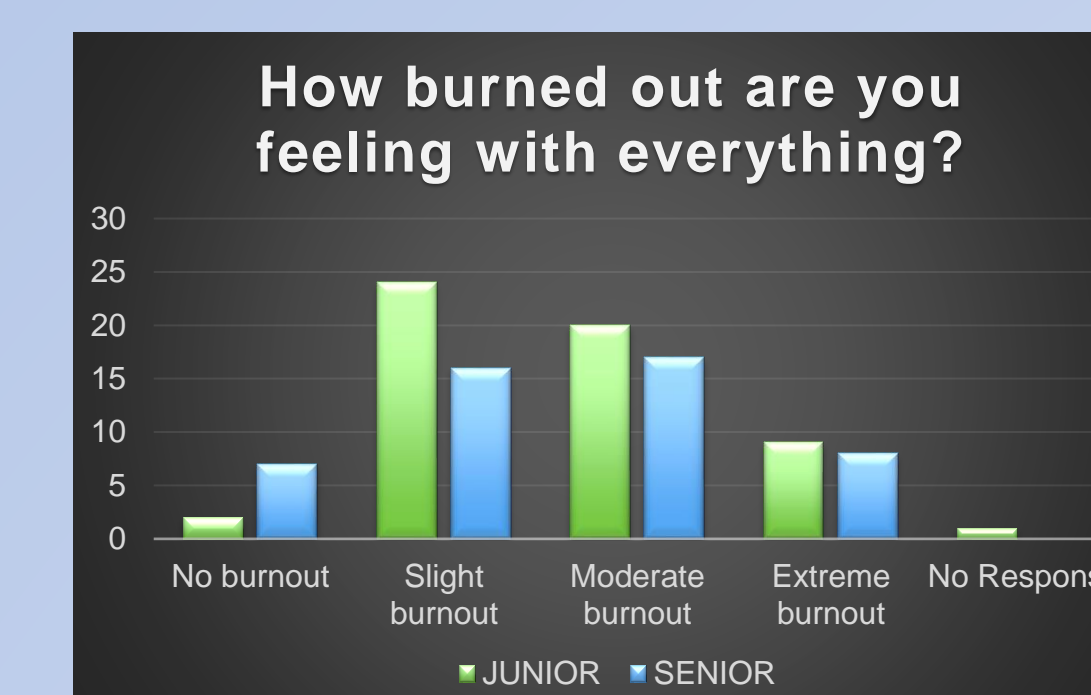
After a year, students continue to experience some sort of difficulty while engaging with distance learning. The Juniors expressed that something is better than nothing, while the Seniors found it hard to focus in a home environment.



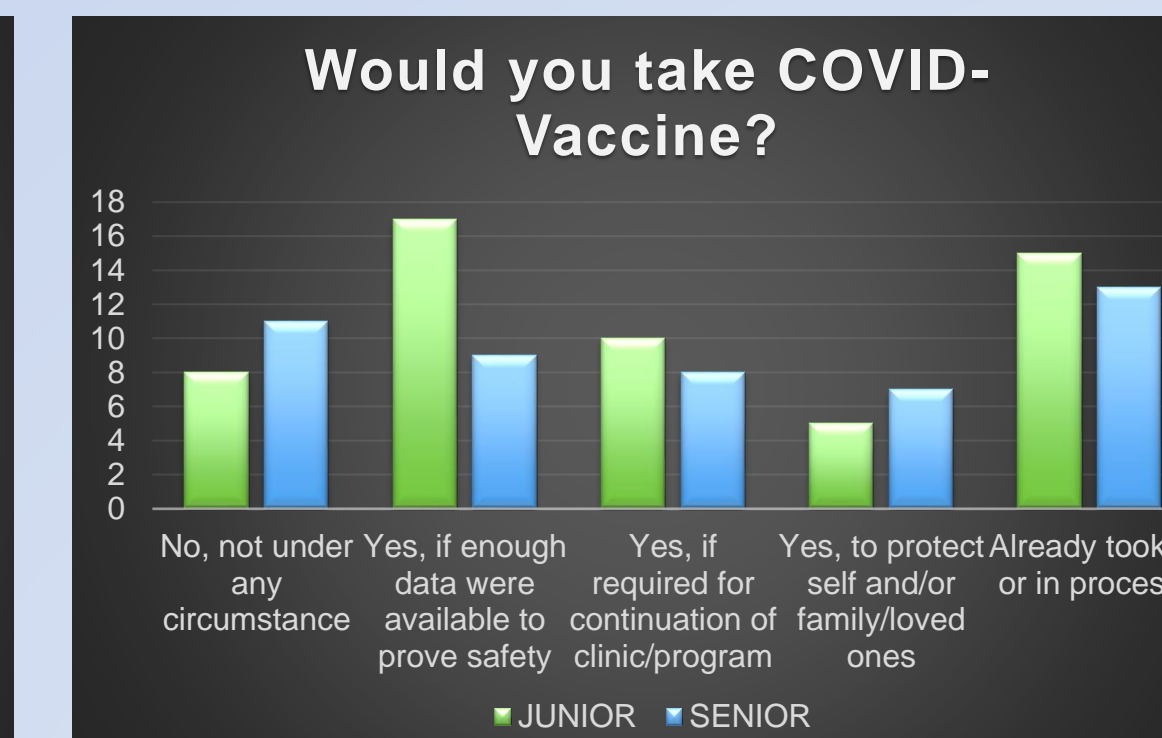
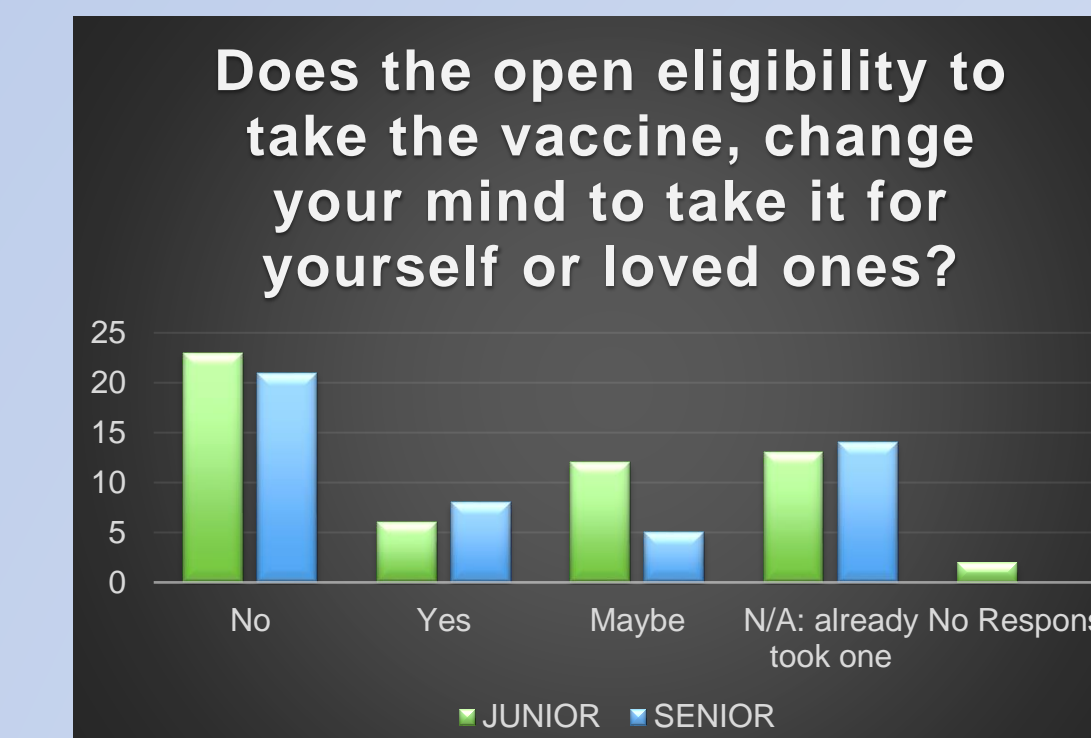
Both Junior and Senior classes missed the social interaction amongst their peers and instructors during distance learning.



Both cohorts experience similar levels of lack of focus and motivation over the course of the Spring semester.



The Juniors reported more "slight burnout" than Seniors who reported "moderate burnout". Both classes express approximately the same amounts of didactic satisfaction.



Quite a few students of both cohorts are against taking the COVID vaccine for themselves and family members. About a quarter of both classes have either taken the vaccine or are in the process of.

Conclusion

At this mid-semester checkpoint, students are adapting to the current educational model with varying degrees of frustration and motivation. Both groups are progressing with their clinical education which applies the didactic hybrid distance learning in a practical environment under the umbrella of COVID-19 infection. The final survey will poll the students on how the semester ended and how the Junior students feel about their next year. The Senior students will be preparing for their registry exams and perhaps thinking about their next step in their education or career.

References

- Daniels, L.M., Goegan, L.D., P.C. The impact of COVID-19 triggered changes to instruction and assessment on university students' self-reported motivation, engagement and perceptions. Soc Psychol Educ 24, 299-318 (2021) <https://doi.org/10.1007/s11218-021-09612-3>
- Covid-19: Vaccine eligibility. (n.d.). Retrieved March 30, 2021, from <https://www1.nyc.gov/site/doh/covid/covid-19-vaccine-eligibility.page>