PHYS ORG

Student expectations, self-confidence major predictors for how they fare in remote learning

September 23 2020, by Molly Rosbach

Credit: Pixabay/CC0 Public Domain

A new Oregon State University study found significant links between students' self-perception upon entering remote courses and their overall academic performance.

The study surveyed OSU students taking Introductory Psychology in spring 2020, when schools worldwide pivoted quickly to online instruction when the coronavirus pandemic hit.

While several studies have examined self-reported student satisfaction with learning from the last-minute shift to remote classrooms, this study used an objective standard: student final exam scores.

The researchers found that the biggest factors in student academic performance were students' self-efficacy—their beliefs about whether they would succeed or fail in the online environment—and the degree to which they were able to take classes in their preferred format, whether synchronous or asynchronous.

Study author Regan A.R. Gurung, director of the general psychology program at OSU and interim director of the Center for Teaching and Learning, explained the concept of self-efficacy as a combination of past experience, general confidence in oneself, and personal motivation.

"What's really interesting is that many of these students who don't think they would like remote learning, really don't know. They have no past experience," Gurung said. "What happened here was people sort of bringing preconceptions into their course, regardless of whether their beliefs were accurate or not. If you think you're not going to like something, that will change how you deal with it."

The study, published in Scholarship of Teaching and Learning in Psychology and co-authored by psychology doctoral student Arianna Stone, surveyed 649 students from 11 sections of Intro Psych and then looked at the relationship between students' attitudes and their exam scores.

Gurung and Stone found a significant difference in exam scores among

students whose responses indicated high self-efficacy compared with those who reported lower self-efficacy. Those with low self-efficacy also reported the biggest changes in their learning behaviors during the pandemic.

Overall, students did well in the course, despite the challenging and novel circumstances of spring term. Gurung said there was no statistically significant difference in student scores between comparable fall 2019 class and spring 2020 classes.

Also contributing to self-efficacy was whether students were able to take courses in their preferred format— synchronous or asynchronous. About a third of the students in the study were "misaligned," taking the course in their non-preferred format.

To help alleviate these issues, Gurung said the most important thing instructors can give students is clarity: Make sure they are fully informed of what the course will be like at the outset so they can have realistic expectations and plan ahead.

"The clearer we can make things so they know what they're going to get, the better," he said.

To that end, he wrote a letter to his upcoming fall term students before classes started, outlining what his courses will be like.

"Up front, I said, 'Some of you may have these perceptions; here's why you need not worry,'" Gurung said. "Reaching out early is key. I think what this study's saying is, recognize and acknowledge some of the perceptions that are going on that may be influencing learning."

Gurung advises that students reach out to their instructors as soon as they feel they need help.

Doubt and worry are natural during a time of heightened stress such as the pandemic, he said, but if it's interfering with [daily life](), students should not hesitate to seek out mental health resources on campus to learn healthy coping mechanisms.

"Don't feel like you have to sit there and be worried. We the faculty are here for the students, so come talk to us," Gurung said. "There's a lot of new stuff coming. Be open to the new stuff. You may be surprised at how good it is."

Provided by Oregon State University