

Findings

The purpose of this study was to examine the attitudes of the students at Longwood University in response to the changes that have taken place at Longwood University in response to the COVID-19 pandemic. The hypothesis that tested was that students experiencing anxiety during the COVID-19 pandemic would have a negative attitude towards online learning. The dependent variable in this study is a student's self-assessment of their own ability to succeed in the online learning environment. The dependent variable was operationalized through a 1-10 scale response question, 1 being "not confident at all" and 10 being "extremely confident." The independent variable in this study was student anxiety during the COVID-19 pandemic. The independent variable was operationalized through the question "Would you say that you have felt more anxious during the COVID-19 pandemic?" Participants answered on a scale that gave insight into students' sources of anxiety. The possible responses consisted of "Yes, because I'm worried about health issues", "Yes, because I'm worried about my education", "Yes, because of both health issues and educational changes", "No", "I'm not sure", and "maybe." The findings of this study based on careful analysis of the data collected reflect that there is a fairly moderate relationship between the independent and dependent variable.

First, in this study each of the variables were analyzed individually. For the dependent variable, confidence in ability to succeed in the online/hybrid learning environment the mean was 6.19 with a standard deviation of 2.38. This means that 74% of students answered between 3.81 and 8.57. This shows that there was a high level of variance in answers on the dependent variable. The descriptive statistics for the independent variable are located below in Table 1.

Table 1.

Percentage of students feeling anxious during the COVID-19 pandemic.

| Anxiety During the COVID-19 Pandemic | Count | Percent |
|--|-------|---------|
| Yes,because I am worried about health issues. | 19 | 4.40 |
| Yes,because I am worried about my education. | 82 | 18.98 |
| Yes, because I am worried about health issues & educational changes. | 257 | 59.49 |
| No | 48 | 11.11 |
| I'm not sure | 13 | 3.01 |
| Maybe | 13 | 3.01 |

Note. N=432

For the question, Would you say you have felt more anxious during the COVID-19 pandemic, 4.40% of students reported feeling anxious because they were “worried about health issues.” 18.98% of students reported feeling anxious because they were worried about their education. The majority, 257 respondents reported feeling anxious “because of both health issues and educational challenges” which made up 59.49% of the total responses 11.11% of students reported not feeling anxious during the COVID-19 pandemic, 3.01% of students reported that they were not sure whether they were anxious during the COVID-19 pandemic, and 3.01% of students reported that they “maybe” are feeling anxious during the COVID-19 pandemic.

When self assessed ability to succeed with online learning was compared to anxiety felt during the COVID-19 pandemic students who reported lower levels of confidence in their ability to achieve success with online learning also reported feeling anxiety during the COVID-19 pandemic. Students who said “Yes, because I’m worried about health issues” had a mean of 7.6, students who said “Yes,because I’m worried about my education has a mean of 5.62, and students who said “Yes, because I am worried about health issues and educational changes” which had the highest frequency of response had a mean of 5.9. Students who responded “No” had a mean of 7.31, students who responded “I’m not sure” had a mean of

7.92, and students who responded “maybe” had a mean of 7.67. Results for this analysis located in Table 2.

Table 2.

Mean score of ability to succeed by anxiety during the COVID-19 pandemic.

| Anxiety During the COVID-19 Pandemic | Means |
|--|-------|
| Yes,because I am worried about health issues. | 7.63 |
| Yes,because I am worried about my education. | 5.62 |
| Yes, because I am worried about health issues & educational changes. | 5.9 |
| No | 7.31 |
| I'm not sure | 7.92 |
| Maybe | 7.67 |

Note. N=432

Table 2 shows the comparison between the respondents' feeling of anxiety during the COVID-19 pandemic compared to the confidence students felt in their ability to succeed in the online learning environment. The researchers hypothesis in this study was that students experiencing anxiety would have a negative attitude towards online learning. While the results of the bivariate analysis show that students who reported feeling anxiety during the COVID-19 pandemic reported moderate levels in their ability to succeed in some cases. The results also show that a portion of the respondents who reported feeling anxiety “because I am worried about health issues” had a similar mean to the portion of respondents that reported “No” “I’m not sure” and “maybe.” This means that while there maybe a possible relationship between the two variables the relationship is not strong.

In order to further examine the relationship between the two variables, multiple statistical analysis tests were carried out, reflecting similar results. A Pearson’s Correlation was carried out in order to help determine the association between the two variables. For the purposes of the Pearson Correlation the responses of the independent variable were re-coded

and assigned a number 1-6 to represent the responses. The result of the Pearson Correlation was 0.1480382. This means that the dependent variable of a student's self-assessment of their own ability to succeed in the online learning environment and the independent variable of anxiety during the COVID-19 pandemic have a weak positive correlation. This means that while there is a relationship between the independent and dependent variables, this relationship is not strong. The research hypothesis in this case, although the correlation is weakly positive, should be accepted and the null hypothesis should be rejected.

The results of the Chi Squared Test showed a more definitive conclusion of the relationship between the variables. For the purposes of the Chi Squared test the independent variable was re-coded into two categories: "Anxious" and "Not Anxious." Also, for the purposes of conducting the Chi Squared Test the dependent variable was also re-coded into two categories: "Did not feel confident" and "Confident." The independent variable in this study was student anxiety during the COVID-19 pandemic. The results of this test are located in Table 2.

Table. 3
Chi Squared Test of Confidence by Anxiety

| Anxiety | Confidence | |
|-------------|------------------------|-----------|
| | Did not feel confident | Confident |
| Not Anxious | 33 | 62 |
| Anxious | 106 | 200 |
| Chi Squared | 0.95084 | |

Note. $p < 0.5^*$, $p < 0.01^{**}$, $p < 0.001^{***}$

The results of the Chi Squared test showed that the Chi Squared value of 0.95084, therefore the null hypothesis is maintained and the research hypothesis is rejected. This means that there is no significant difference between these categories.

While statistical testing results remained largely comparative to one another, the most unique results came from the Linear Regression, which is located in Table 4.

Table 4.

Linear Regression of Anxiety and Confidence in Ability to Succeed in Online Learning

| Variable | Coef. | Standard Error | R ² |
|----------|---------|----------------|----------------|
| Anxiety | 0.379** | 0.125 | 0.02 |

Note: p<.05*, p<.01**, p<.001***, N=433

For the purposes of the Linear Regression the independent variable responses were re-coded and assigned a number 1-6. The results of the linear regression showed for every one unit increase in student anxiety during the COVID-19 pandemic there is a .379 unit increase in student's confidence in their ability to succeed in the online learning environment. This model explains 2.0% of the variation in student confidence in ability to succeed in the online learning environment.

While the majority of the aforementioned statistical tests showed that there was either no significant relationship or a weak positive relationship between the two variables, the results of the Linear Regression moves opposite completely of the research hypothesis. The stated research hypothesis as previously mentioned was that students experiencing anxiety during the COVID-19 pandemic would have a negative attitude towards online learning. The results of the Linear regression showed the inverse of this. Meaning that as students became more anxious the amount of confidence in their ability to succeed experienced an increase. This suggests in the case of this statistical test that the research hypothesis should be rejected.

However, in conclusion it is important to note that while there is not a strong relationship based on the results of the study between student anxiety during the COVID-19 pandemic and students confidence in their own ability to succeed in the hybrid and online

learning environments, that students are reporting a large level of anxiety. 306 students out of a sample of 432 students reported feeling anxious. This number represents nearly 71.0% of the total respondents. This finding is important to future research although it may not be strongly related to students confidence in their ability to succeed. In the future further research should be done on the sources of student anxiety due to such a large portion of the students who reported their experience. While individuals are young their brain is still being formed and developed. Therefore safeguarding the mental health of individuals for the future is crucial to the health of the world population and success in the future.