



# The Psychological Consequences of COVID-19: What is the Experience for College Students?

Molly J. Hedrich (Trisha M. Karr Ph.D.)

## Abstract

The coronavirus disease, also known as COVID-19, undoubtedly changed the lives of many American citizens after its initial impact in the United States back in March 2020. A specific proportion of the U.S. population that is often overlooked regarding economic and emotional disparities is that of college students. COVID-19 has brought about even more changes and issues on top of the preexisting ones that college students already must endure. The purpose of this study was to consider the many variables of college students living during a pandemic. Participants from a Midwestern university completed a series of online surveys measuring demographics and mental health. Hierarchical multiple regression models were used to assess the ability of psychological factors (affect, resilience) to predict symptoms of depression and anxiety after controlling for the influence of life transitions. For both the depression and anxiety models, the total amount of variance explained was 50%,  $p < .05$ . Findings showed that despite the experience of challenging life transitions, college students were protected by resilience and positive affect relative to their reported depression and anxiety scores. This study further highlights the importance of maintaining protective factors for managing depression and anxiety, especially when living during a pandemic.

## Participants

- ❖ 121 College Women
  - 87.6% Caucasian, 11.7% Other
  - Approx. 56% Underclassmen, 44% Upperclassmen
  - Clinical Diagnoses: 20.7% Major Depression Disorder, 38.8% anxiety disorders
  - From 2020-2021, 99.2% of students were either fully online or in hybrid courses
  - From 2020-2021, 90.8% of the students reported either already having COVID-19 or personally knowing someone who was inflicted by it

## Methods

### Procedure

- ❖ This study was approved by the Winona State University IRB.
- ❖ Undergraduate college students were recruited for the completion of online surveys over the course of two academic semesters.
- ❖ Participants completed a demographic survey, a depression scale, an anxiety scale, a resilience scale, and a positive/negative affect scale.

### Analysis

- ❖ A hierarchical multiple regression was performed.

### Measures

- ❖ Demographics: Academic standing, sex, financial/work status, physical health/activity, basic mental health information, and number of transitions
- ❖ Depression: The Center for Epidemiologic Studies Depression-Revised scale
- ❖ Anxiety: The Generalized Anxiety Disorder-7 scale
- ❖ Resilience: The Connor-Davidson Resilience scale 10
- ❖ Positive/Negative Affect: The Positive and Negative Schedule

## Results

**Table 1**  
Hierarchical Multiple Regression Analysis Summary Predicting Depression Symptoms Across Four Steps

Step	B	SE B	Beta	sr	Change in R <sup>2</sup>	R <sup>2</sup>
Step 1					.16***	.16
Constant	8.64	2.65				
Transitions	2.86	.63	.40***	.40		
Step 2					.23***	.39
Constant	-9.61	3.68				
Transitions	1.83	.56	.26***	.25		
Negative Affect	.93	.15	.50***	.48		
Step 3					.07***	.46
Constant	8.75	6.10				
Transitions	1.96	.53	.27***	.26		
Negative Affect	.82	.14	.44***	.41		
Resilience	-.64	.17	-.27***	-.23		
Step 4					.07***	.52
Constant	19.10	6.37				
Transitions	1.63	.51	.23*	.22		
Negative Affect	.75	.14	.40***	.37		
Resilience	-.31	.19	-.13	-.11		
Positive Affect	-.50	.13	-.30***	-.26		

Note. sr = semipartial correlation coefficient. \* $p < .05$ . \*\*\* $p < .001$ .

**Table 2**  
Hierarchical Multiple Regression Analysis Summary Predicting Anxiety Symptoms Across Four Steps

Step	B	SE B	Beta	sr	Change in R <sup>2</sup>	R <sup>2</sup>
Step 1					.07*	.07
Constant	5.43	1.00				
Transitions	.68	.24	.27*	.27		
Step 2					.39***	.46
Constant	-3.23	1.23				
Transitions	.19	.19	.08	.07		
Negative Affect	.44	.05	.66***	.63		
Step 3					.03*	.50
Constant	1.42	2.10				
Transitions	.23	.18	.09	.08		
Negative Affect	.41	.05	.62***	.58		
Resilience	-.16	.06	-.19*	-.18		
Step 4					.03*	.53
Constant	3.86	2.27				
Transitions	.15	.18	.06	.06		
Neg. Affect	.40	.05	.59***	.55		
Resilience	-.08	.07	-.10	-.09		
Positive Affect	-.12	.05	-.20*	-.17		

Note. sr = semipartial correlation coefficient. \* $p < .05$ . \*\*\* $p < .001$ .

- ❖ Resilience added an additional 7% of the variance to depression ( $\Delta F(1, 107)=13.43, p < .001, \Delta R^2 = .07$ ), positive affect added an additional 7% of variance to depression ( $\Delta F(1, 106)=14.31, p < .001, \Delta R^2 = .07$ ), above and beyond all other factors.
- ❖ Resilience added an additional 3% of the variance to anxiety ( $\Delta F(1, 108)=7.29, p < .05, \Delta R^2 = .03$ ), positive affect added an additional 3% of variance to anxiety ( $\Delta F(1, 107)=6.28, p < .05, \Delta R^2 = .03$ ), above and beyond all other factors.

## Study Aim & Hypotheses

- ❖ The aim of the study was to examine the hierarchical structure of protective factors in relation to depression and anxiety.
- ❖ Hypothesis 1: Transitions and negative affect will be positively associated with depression and anxiety.
- ❖ Hypothesis 2: Beyond the effects of transitions and negative affect, resilience and positive affect will be negatively associated with depression and anxiety.

## Discussion

- ❖ During a pandemic, negative affect and transitions were significantly associated with depression and anxiety levels. However, beyond these factors, resilience and positive affect can offer a protective effect on these symptoms.
- ❖ Resilience was negatively associated with depression and anxiety symptoms.
- ❖ Positive affect was also negatively associated with depression and anxiety symptoms.
- ❖ Given these findings, mental health professionals should consider further assisting students in fostering resilience and positive affect to help combat the challenges of living during a pandemic.
- ❖ Future research should include a more generalizable sample, which would involve more diverse characteristics (e.g., geographical location, biological sex, mental health history), to further encapsulate the varied experiences of college students living during a pandemic.