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# How Coping Affected Cognitive Engagement in Online Courses During the Covid-19 Pandemic



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## INTRODUCTION

The Covid-19 pandemic substantially affected higher education. Seemingly overnight, students rapidly transitioned from “business-as-usual” to virtual learning (Crawford et al., 2020), drastically changing the landscape of academic social structures and learning communities that usually provide academic support and aim to foster a sense of belonging (Baumeister & Leary, 1995). Little is scientifically known about student learning and coping during the initial days of the Covid-19 pandemic. This study examined how different *coping styles* during the lockdown period of the pandemic affected students' *cognitive engagement* in their online courses in Los Angeles.

### Research Questions

**RQ<sub>1</sub>**: How did students cope with the transition to virtual instruction during Covid-19?

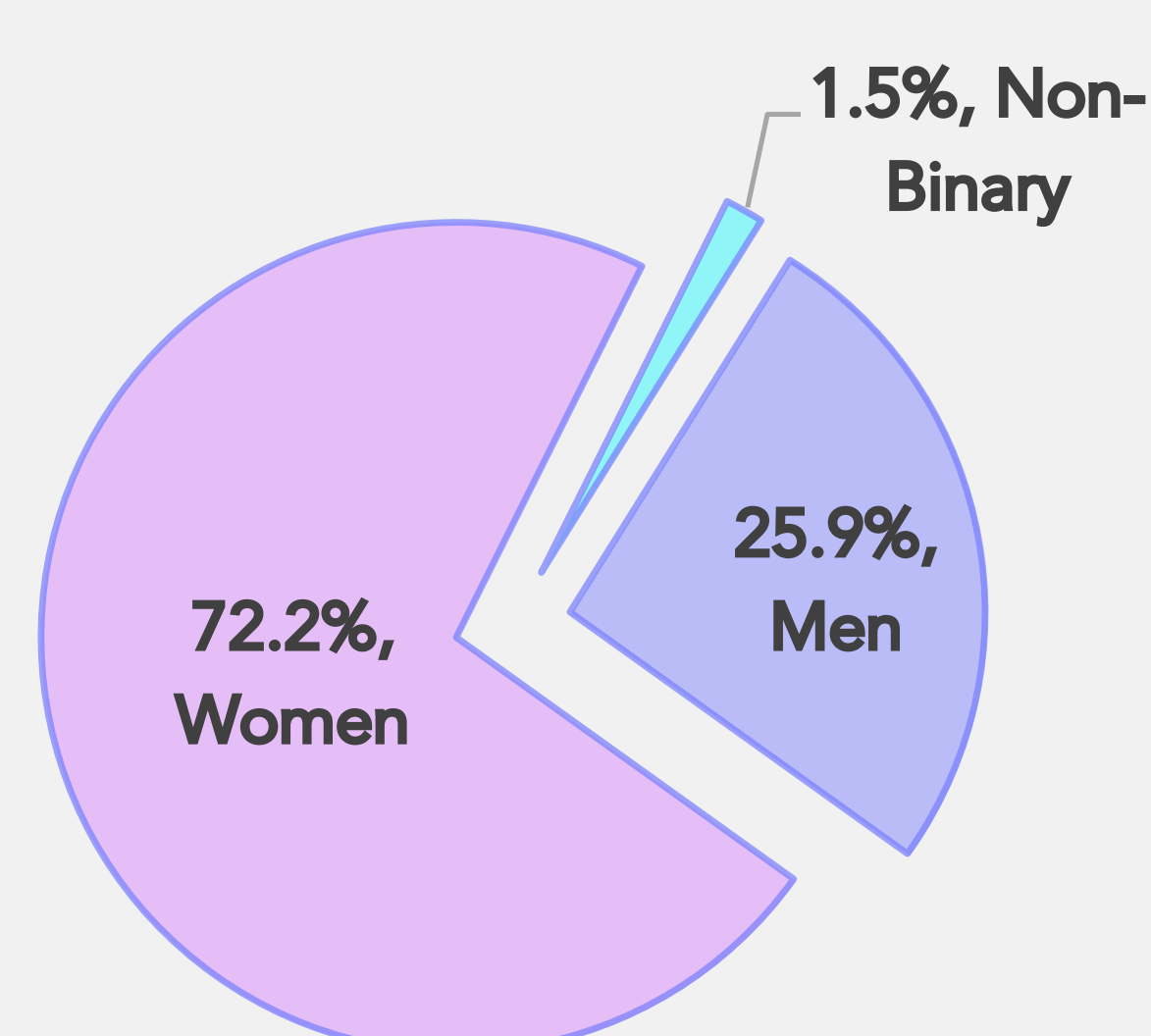
**RQ<sub>2</sub>**: How were students' coping styles related to cognitive engagement in their online courses?

## METHODOLOGY

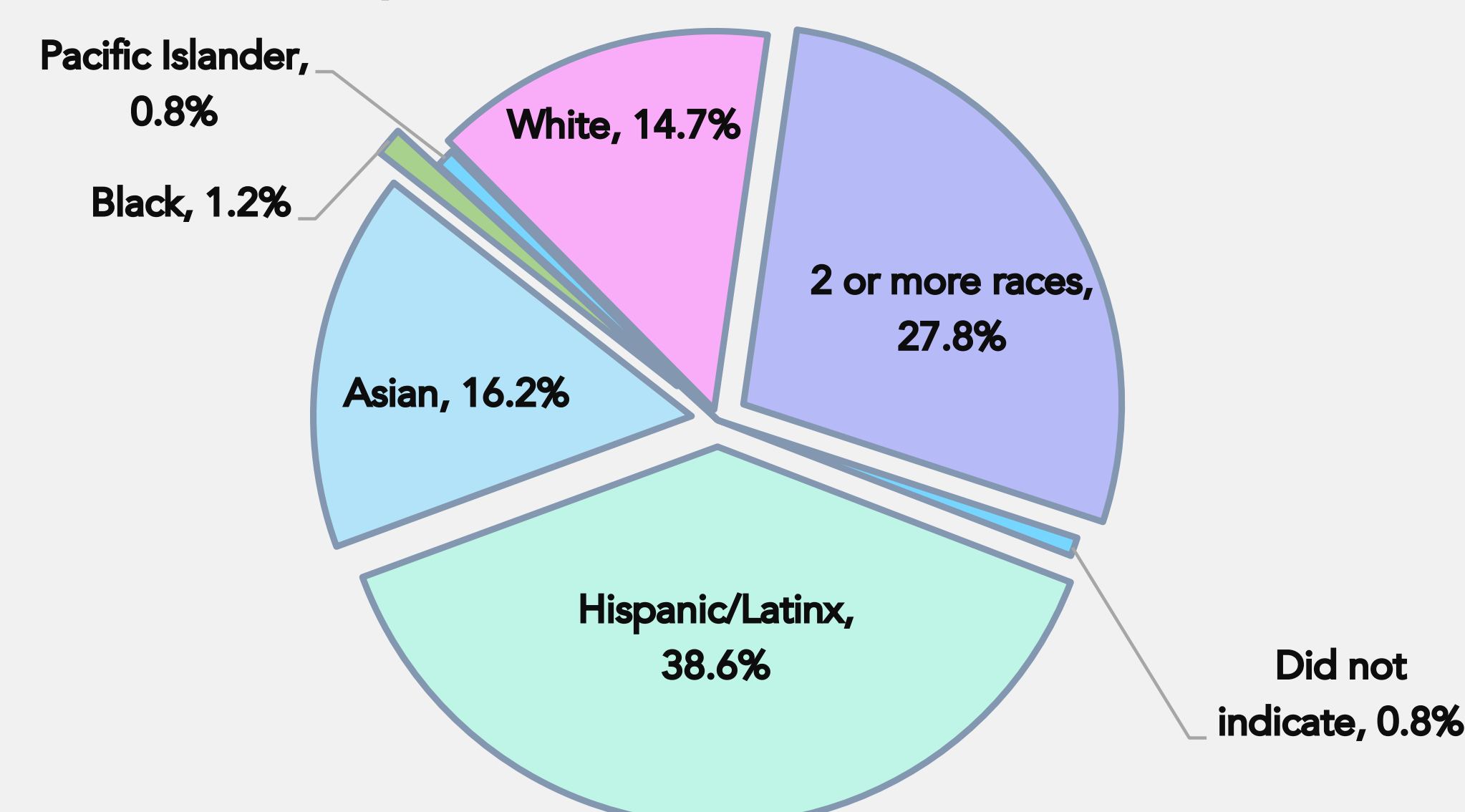
### Participants

$N = 257$  Undergraduate Students;  $M_{age} = 22.11$  years old;  $SD_{age} = 4.86$

Participant Gender Breakdown



Participant Racial/Ethnic Breakdown



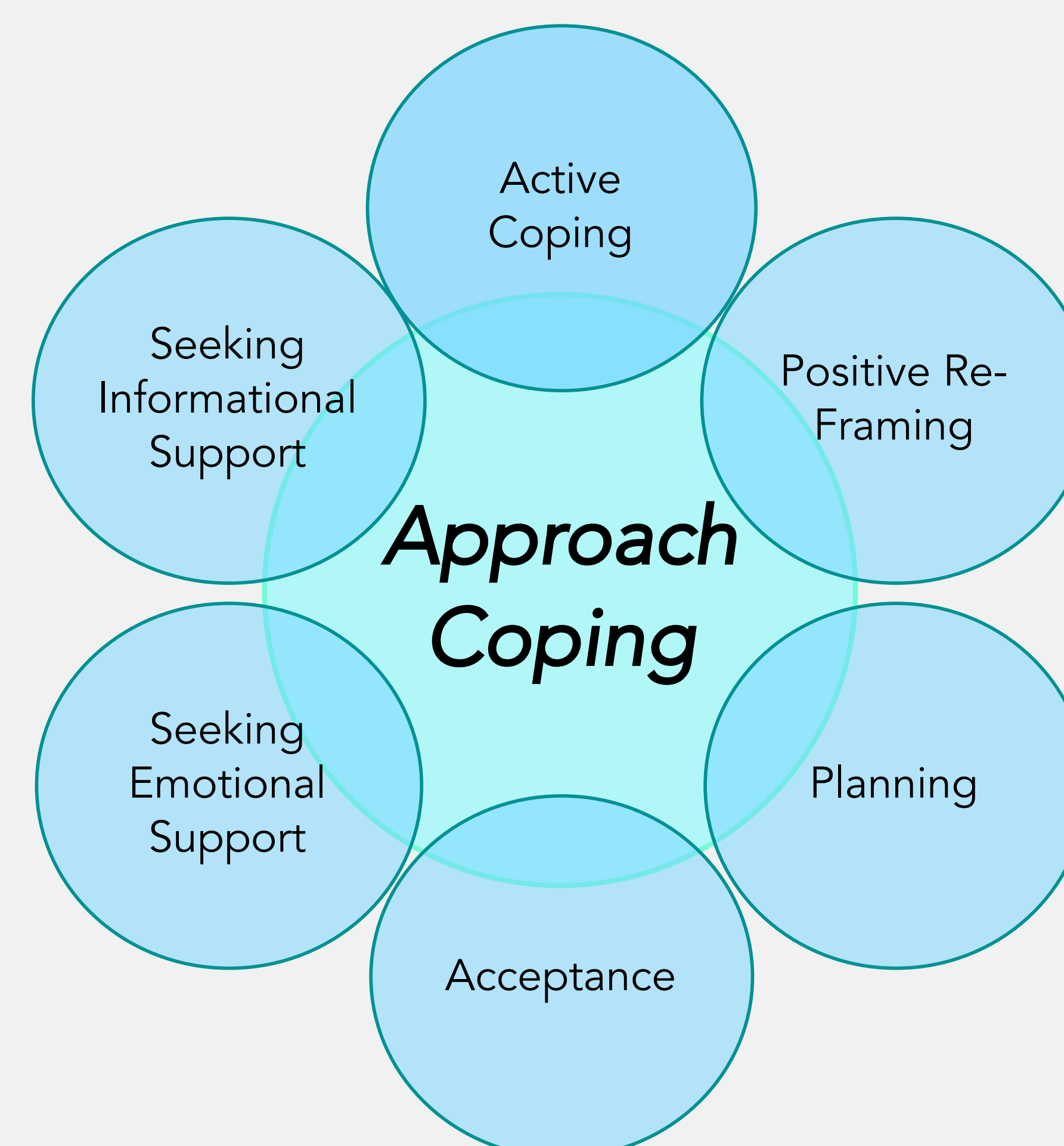
### Survey Measures

- Brief Coping Inventory (Carver, 1997)
- Cognitive Engagement – Cognitive Engagement Measure (Greene & Miller, 1996; Pintrich et al., 1991)

## RESULTS

Multiple regression analysis showed that the four different coping styles significantly predicted cognitive engagement ( $R^2 = .16$ ,  $R^2_{adj} = .14$ ,  $F(4, 253) = 11.58$ ,  $p < .001$ ).

- Approach coping was associated with *higher* cognitive engagement in virtual courses ( $\beta = .32$ ,  $t(253) = 4.98$ ,  $p < .001$ ).
- Humor coping was associated with *less* cognitive engagement ( $\beta = -.15$ ,  $t(253) = -2.48$ ,  $p = .014$ ).



**Approach coping** is a way of dealing with stress that focuses on facing the situation at hand and using active problem solving. These eight coping methods form a part of approach coping.

*Note:* Approach coping and avoidance coping (Roth & Cohen, 1986) were devised using a composite of subscales from the Brief Coping Inventory (Carver, 1997)

### Regression Analysis of Coping Styles on Cognitive Engagement

Variable	B	Standard Error B	$\beta$
Approach	.63	.13	.32***
Avoidant	-.24	.17	-.09
Humor	-.18	.07	-.15**
Religion	.11	.07	.09

*Note.* \*\* $p < .01$ , \*\*\* $p < .001$

## DISCUSSION

Humor may have been employed as a type of avoidant coping, which seemed to have lessened engagement. Results suggest that empowering students to employ *approach coping* during difficult times may predict higher student engagement during virtual learning. This implies that universities may seek to help augment student success by developing programs and resources designed to help students develop approach coping skills.

Future research may seek to examine the long-term impact of different coping styles on student well-being and student success during the pandemic.

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