# Anxiety at the beginning of the COVID-19 Pandemic: Associations between health anxiety, COVID-19 anxiety, and preventative behaviors

Lauren E. Elmore, University of Mississippi & Laura J. Dixon, PhD, University of Mississippi



leelmore@go.olemiss.edu

## BACKGROUND

Following the emergence of COVID-19, there was a significant increase in mental health issues, particularly anxiety.

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- Health anxiety is the phenomenon of interpreting bodily sensations as symptoms of a more serious disease and is often accompanied with disproportionate thoughts of anxiety.
- Increases in engagement of preventative behaviors and cognitive distortions typical of health anxiety were prevalent.
- Little work has examined the association between COVID-19 anxiety and health anxiety.

#### CURRENT STUDY

- The aim was to examine the bivariate associations of COVID-19 anxiety, health anxiety, and COVID-19 preventative behaviors among college students.
- We predicted higher health anxiety would be positively associated with COVID-19 anxiety and engagement in preventative behaviors.

#### **METHOD**

- College students were recruited at the University of Mississippi. The sample (N = 263,  $M_{age} = 19.57$  years) was primarily female (63.9%) and White (75.7%).
- Data was collected between March 19th, 2020 and May 1st, 2020.
- Participants answered self-report measures of COVID-19related anxiety, a checklist measure of preventative behaviors (e.g., "Engaging in social distancing", "Cancelation of travel"), and the Short Health Anxiety Index (SHAI; Abromowitz et al., 2007).

### **RESULTS**

- 6.5% reported clinical levels of health anxiety.
- Individuals engaged in between 0 and 15 preventative behaviors. The most common preventative behaviors endorsed were "Staving home as much as possible" (n = 235) and "washing hands often" (n =232). On average, individuals engaged in 9.22 (SD = 3.35; Modes = 9, 11; Range = 15) preventative behaviors. See Figure 1.
- See Table 1 for correlation results. As hypothesized, there was a significant positive correlation between COVID-19 anxiety and health anxiety, including the illness likelihood subscale of the SHAI and the negative consequences
- COVID-19 anxiety showed a significant positive correlation with preventative behaviors.
- Contrary to hypothesis, there was no significant association detected between COVID-19 preventative behaviors and health anxiety symptoms.

COVID-19 anxiety, but not health anxiety, is significantly associated with COVID-19 preventative actions.





Figure 1. Percentage of Engagement Frequency (N = 263)

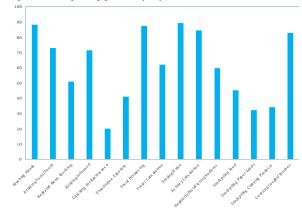


Table 1. Pearson Bivariate Correlations of COVID-19 Anxiety and Health Anxiety

		1	2	3	4	5
1. Negative Consequences		-				
2.	Illness Likelihood	.497**	-			
3.	Health Anxiety Total	.689**	.971**	-		
4.	COVID-19 Anxiety	.300**	.342**	.368**	-	
5.	COVID-19 Preventative Actions	.102	.088	.102	.342**	-
Mean		2.57	10.90	13.46	8.19	9.22
Standard Deviation		2.01	6.14	7.35	3.54	3.35

Note. Negative consequences = Short Health Anxiety Inventory (SHAI) Negative Consequences subscale; Illness Likelihood = SHAI Illness Likelihood subscale; Health Anxiety Total = SHAI total score; COVID-19 Anxiety = COVID-19 DOCS score; COVID-19 Preventative Actions = COVID-19 Precautions Checklist \*\* = denotes a correlation is significant at the 0.01 level.

#### DISCUSSION

- This data was collected at the early stages of the pandemic. Consistent with national recommendations, many individuals endorsed engagement in preventative behaviors. These behaviors, while generally adaptive, can become problematic, as the current study demonstrates strong associations between preventative behaviors and anxiety that may become distressful and impairing.
- Results indicate that while associated, COVID-19 anxiety and health anxiety appear to be measuring different attributes of anxiety.
- Illness-specific anxiety is classified solely as health anxiety; however, the relationship may prove to be more complex. Understanding these distinctions is important for treatment purposes, as the behavioral presentation of these two constructs may not align fully and should be assessed on
- Engagement in the preventative behaviors for a prolonged period along with prolonged anxiety may contribute to longterm distress, as health anxiety, which is often brought on by health-related events, has been shown to have a reported long-term impact on an individual's physical and mental health functioning.

