



# Stressors Impacting Mental Health Outcomes among College Students

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## Abstract

The aim of this exploratory study was to investigate which stressors (academic, psychosocial or health) were affecting college students the most and how different groups were experiencing the sources and severity of stressors. Stressors across the categories of academic, psychosocial and health, were all positively correlated with measures of anxiety, depression and loneliness with psychosocial stressors having the strongest correlation to anxiety and loneliness. Health stressors were the most highly associated with depression.

## Relevance

In a recent study conducted by the American College Health Association (2019), approximately 65% of students experienced overwhelming stress or anxiety in the past year. While stress has its function in everyday life, it is reaching a point of hindrance for many, including college students for whom it is becoming more prevalent (Winerman, 2017; Mackenzie et al., 2011; American College Health Association, 2019).

## Methods

- Data was collected via Qualtrics at a small liberal arts college over a two-week period as part of one wave of data from longitudinal study on student mental health. (N=966).
- Students were informed that if they responded they would be entered into a raffle drawing for gift cards.
- The project was approved by the author's Institutional Review Board.

## Measures

- Sources and Severity of Stress Scale (S3S; Shah et al, 2010) {Academic  $\alpha$  .819, Psychosocial  $\alpha$  .838 and Health Stressors  $\alpha$  .787}.
- Generalized Anxiety Disorder Screener (GAD-7; Spitzer, Kroenke, Williams, 2006) .
- Patient Health Questionnaire (PHQ-9; Kroenke, K., Spitzer, & Williams, 2001) .
- UCLA Loneliness Scale (Version 3; Russell, 1996).

## Results

Correlations of Stressors and Mental Health			
	Anxiety (GAD 7)	Depression (PHQ9)	Loneliness (UCLA)
Academic	.399	.428	.298
Psychosocial	.476	.540	.529
Health	.298	.529	.348

Stressors by Race				
	N	Mean (Academic)	Mean (Psychosocial)	Mean (Health)
African American	31	41.77	67.58 a	26.58
API	107	43.53 a	63.02 b	24.98 a
Latinx	59	48.88 b,c	69.15 c	27.20 b
White	676	39.47 a,b	53.43 a,b,c,d	21.68 a,b
Mixed Race/ Other	93	42.20 c	56.62 d	23.76

\*Values within the same column that are denoted with the same subscript are significantly different at the p<.05 level

## Discussion

- The relationship between each category stressor (S3S) and Anxiety (as measured by the GAD-7), Depression (PHQ9) and Loneliness (UCLA) was investigated using Pearson product-moment correlation and found to be positively correlated and statistically significant ( $p < 0.01$ )
- Psychosocial stressors demonstrated the strongest positive correlation to anxiety and loneliness. Health stressors were the most highly associated with depression, likely due to the overlap in depressive symptoms and negative health aspects, such as trouble sleeping (Riemann, Berger, & Voderholzer., 2001).
- One-Way ANOVAs were used to measure the way that students, separated by class, race, sexual orientation and gender, experienced stress.
- When investigating race significant differences emerged along racial/ethnic categories for academic stressors psychosocial stressors, and health stressors.
  - Post-hoc results indicated significant differences for academic stressors were found between white students (M=39.5) and both Asian students (M=43.5) and Latinx students (M=48.9). For psychosocial stressors a significant difference was indicated between white students and each of the other racial categories, with white students experiencing far less psychosocial stress than any other group.
  - For health stressors, significant differences were found between white students (M=21.7) and students who identified as either Asian (M=25.0) or Latinx (M=27.2), indicating once again, that white students were experiencing the least amount of stress in this category.
- When investigating the relationship between socioeconomic status and each stressor category was significantly different ( $p < .001$ ) along socioeconomic status with students from perceived lower classes experiencing more severe stress across categories.
- No significant relationship was found between sexual orientation and academic stressors. However, there was a significant difference among psychosocial stressors between students who identify as heterosexual (M=55.6) and students who identify as bisexual (M=63.0),  $F(3,962) = 3.96$ , ( $p < .001$ ). Significant differences at the  $p < .001$  were also indicated between genders with regards to all categories of stressors, indicating that female students reported experiencing more severe stress in each category.
- These results indicate that a large portion of the negative effects of stress that college students are experiencing are psychosocial in nature. Previous findings by Conley and colleagues (2013) demonstrated similar results. Additionally, the results of this study demonstrate that non-white minority students, students of lower socioeconomic status and female students reported the highest levels of stress, indicating that extra supports need to be put in place to support these students. The racial and gender results are consistent with previous studies (Hall, et al., 2006; McClain et al., 2016).

## Limits

Self-report data, a cross-sectional design and use of a small liberal arts college for sampling are limitations to this study. Further studies should expand explore how racial and socioeconomic status is related to stress in environments that are less stratified. These results are from the first wave of data from a cross sequential study on mental health of college students. Future research should consider the causal directions of these relationships.

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