Feeling Low? Increases in Depression Among College Students: 2009-2015 Jessica Collins, Sophie Hancock, Emma Weiss; Supervised by Hugh Stephenson, Ph.D.

Trends in depression rates in adolescents and young adults have become an area of close study in recent decades. Several researchers argue that depression rates have been increasing over time (Twenge, 2017; Twenge, Gentile, DeWall, Ma, Lacefield, & Schurtz, 2010; Kitzrow, 2003). However, this view is not universally shared (Schwartz, 2010). High neuroticism is a risk factor for depression (Vittengl, 2017) and neuroticism can predispose individuals to addictive behaviors and self-directed negative emotions (Gao et al., 2017). If depression rates are on the rise, it is likely that neuroticism is increasing as well. It could also be that current everyday stressors have become more overwhelming and school has become more intense and demanding of students or that social support has decreased (Twenge, 2017). The current study explores depression rates in 1938 college students in cohorts spanning from 2009-2015. It was predicted that depression rates would rise over time. Similarly, levels of neuroticism and students' experiences with psychotropic medication and psychotherapy were predicted to increase. The relationship with stress and social support, typical predictors of depression, was also examined.

## Methods

The participants in this study were students enrolled at a primarily undergraduate college in the northeastern United States. Participants completed an online survey that included the Zung Depression Inventory, the Perceived Stress Scale, the Big Five Inventory, the Perceived Social Support Scale, and questions regarding their experiences with therapy and medication. There were 1938 participants in total. Participants were 28.6% male, 71% female, and .4% other. 79.9% of the participants were White, 4.9% Black, 6.4% Hispanic, 6.7% Asian or Pacific Islander, and .5% American Indian or Alaskan Native. Data was gathered each semester from the fall of 2009 through the spring of 2015, totalling 11 cohorts.

## Results

Reported depression rates rose steadily from 2009 to 2015. Students in 2015 reported significantly higher rates of depression than students in 2009, resulting in a statistically significant increase in depression over time. Similarly, levels of neuroticism also increased over this period, as did reported use of psychotropic medication. Changes in depression and neuroticism were not matched by changes in levels of perceived stress and perceived social support.

## Discussion

The results of this study largely supported the hypotheses. Increases in depression were both statistically significant and practically meaningful. The average student in 2015 scored more than half a standard deviation above the average scores of students in 2009. Likewise, reported levels of neuroticism in 2015 were higher than the levels reported in 2009. Reported use of psychotropic medication also increased over the six years. In addition, reported use of psychotherapy was found to increase over the period and this change trended towards significance. These higher levels of depression were not due to elevated stress, as levels of perceived stress did not increase in this time period. Additionally, the increased levels of depression were not a function of decreasing social support, which did not change over the six years. Therefore, factors other than these must be responsible. Some studies have explored the relationship between depression and smartphone use to account for this change. Recent research suggests that the rise of smartphones and social media may be correlated with an increase in depression rates (Twenge, 2017). Increased fixation with social media and appearances may be factors that contribute to the significant negative affect. It might also be true that students are more comfortable seeking help and reporting depression since there is less stigma around mental illness (Twenge et al., 2010). Furthermore, it could be that the stressors not measured by the Perceived Stress Scale have become more salient. Future research should confirm this increase and explore the relationship between depression and smartphone use as well as the effects that increased social media use might have on mental health.

## References

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