

# The Anxious Generation: Causes and Consequences of Anxiety Disorder Among Young Americans

## Preliminary Findings

Policy Brief  
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### Freaked Out Millennials

As the first generation raised on the internet and social media, as a generation that came of age in the wake of one of the worst recessions in modern history, and as a generation still grappling with increased economic uncertainty and worsening financial prospects, Millennials are experiencing anxiety like no other generation.

Public policy, public health, medical, and economic experts have yet to comprehensively examine the many important questions that would shed light on this problem: What is the magnitude and nature of this spike in anxiety? Who is most at risk? What is contributing to the rise in anxiety among students and young adults? What are the consequences for young Americans and for society as a whole if this problem goes untreated?

This cross-disciplinary study aims to tackle these questions and provide insight into the causal factors of anxiety. Our study focuses on the particular challenges that college students face, and will propose policy solutions to tackle the problem.

Preliminary research from our study confirms an alarming trend: college students and young adults are more anxious than ever before.

### Over a third of American adults will develop an anxiety disorder during their lifetime

Research shows that nearly 34% of U.S. adults ages 18 to 64 will develop an anxiety disorder at least once in their lives. Data also reveals that anxiety disorders are the most common mental disorders among today's adolescents in the U.S., with approximately 32% of 13 to 17-year-olds having met criteria for an anxiety disorder at least one point in their lives.<sup>2</sup> The fact that adolescents have already reached anxiety prevalence rates almost as high as those in adults indicates that anxiety prevalence will likely only continue to increase as current younger generations age.

Focusing in on the millennial population and students, we discover that anxiety is growing as a problem among college students and young adults.

According to data gathered from 147 college and university counseling centers, anxiety and depression are the most common presenting mental health concerns of students visiting college counseling centers and are the only presenting concerns with a clear upward trend over the last 4 years.<sup>3</sup> Surpassing depression in 2009, anxiety is now the top presenting concern.<sup>4</sup> In fact, a report by the Association for University and College Counseling Center Directors found that 2016 marked the seventh year in a row that anxiety was the top complaint among students seeking mental health services (accounting for about half of counseling center visits).<sup>5</sup>

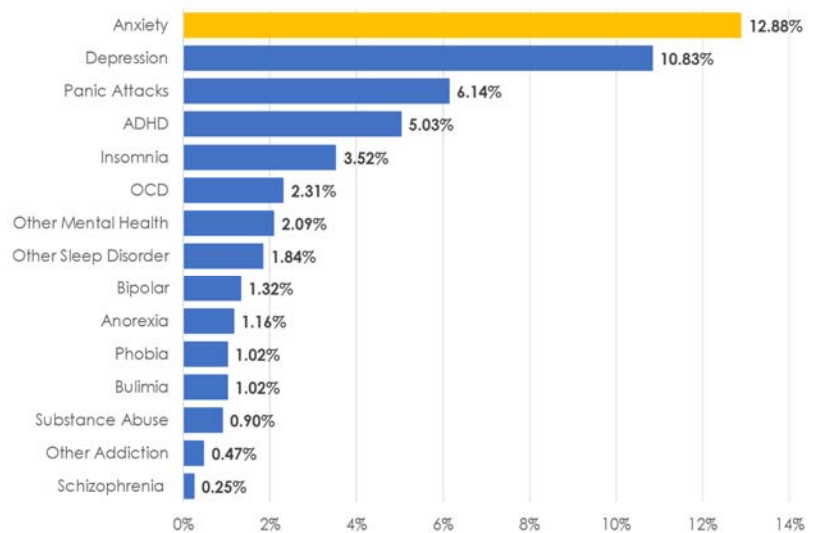
Our study further examines trends underlying anxiety by analyzing the American College Health Association's National College Health Assessment (NCHA) dataset, a nationally recognized research survey that assists colleges and universities in collecting data about student health habits, behaviors, and perceptions.

Preliminary analysis of student data from the NCHA illustrates that anxiety was the most prevalent self-reported mental health diagnosis among college campuses represented between 2011 and 2015 (Figure 1).<sup>6</sup> Consistent with national trends, women NCHA respondents were found to have twice the odds compared to male students of having been diagnosed with anxiety in the past year. When disaggregating gender in the NCHA data to account for transgender and non-binary gender status, we found that nearly 42% of transgender and non-binary students in the National NCHA reported past-year diagnosis or treatment of anxiety. This was a rate nearly triple that of women-identifying students and nearly six times greater than that of students who identify as men.

The overall rate of having been diagnosed for anxiety rose by 48% from 2008 to 2014.

We also find that between 2008 and 2014, the rate of anxiety grew steadily for college students ages 18 to 26 (Figure 2). Both men and women experienced large relative increases in diagnoses over this time period, with women’s diagnoses rising about 47.2% and men’s about 53.2%. The overall rate rose by about 48.4% between 2008 and 2014.<sup>7</sup>

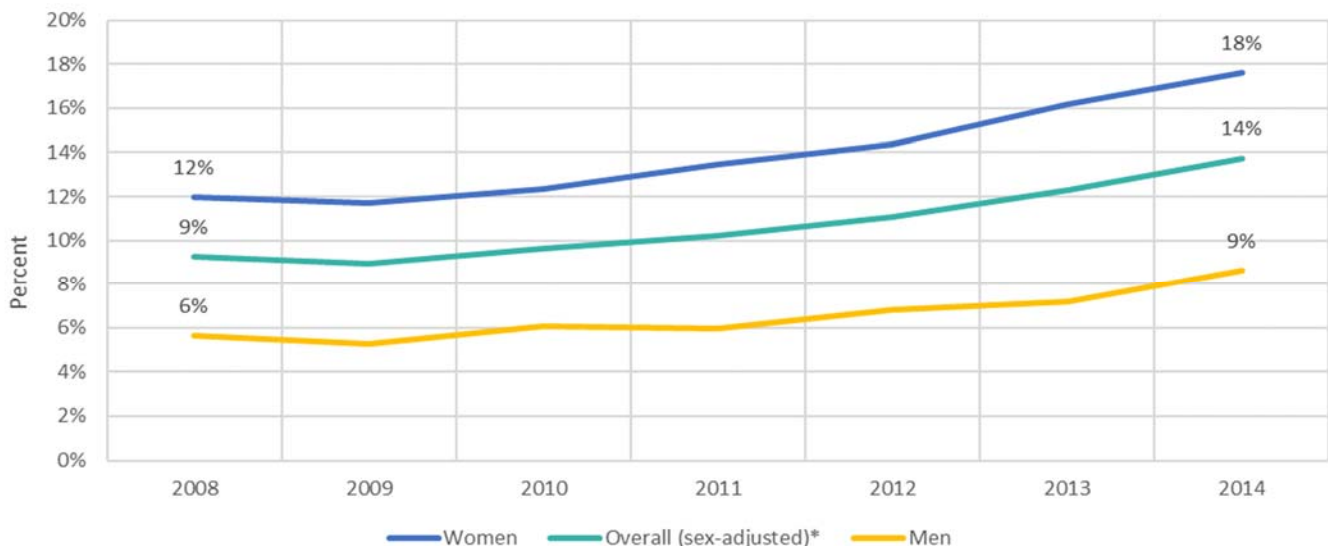
Figure 1: Past-Year Self-Reported Mental Health Diagnoses



Source: National College Health Assessment, 2011 - 2015 (N = 432,375)

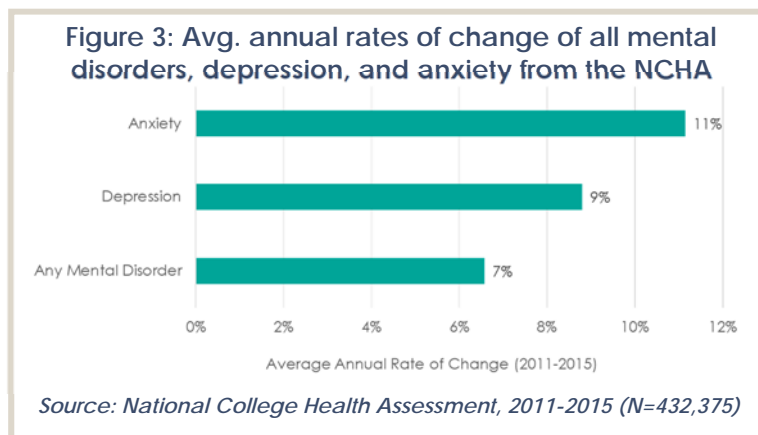
Anxiety and depression are the most common presenting mental health concerns of students visiting college counseling centers and are the only presenting concerns with a clear upward trend over the last 4 years.

Figure 2: Past year anxiety diagnosis by gender among NCHA student respondents aged 18-26



Source: National College Health Assessment, 2008-2015

From 2011 to 2015, the average annual rate of change for anxiety was 11.15%, compared to 6.58% for all mental health diagnoses and 8.8% for depression (Figure 3). This indicates that anxiety is becoming more prevalent at a faster rate than other mental health conditions students face.



**The spike in anxiety is especially pronounced among the youngest college students.**

Compared to older millennials within the NCHA, the youngest age group (18 to 20 year olds) experienced the greatest climb in rates of anxiety. For 18 to 20 year-old women, past-year diagnoses rose relatively by 58.8%. In contrast, the rate rose by 64.69% for men (Figure 4). Notably, men in this sample are experiencing a greater relative increase in the overall rates of past-year diagnoses than women.

Our early analysis of the NCHA data also demonstrates that from 2008 to 2014, the rate of reported anxiety

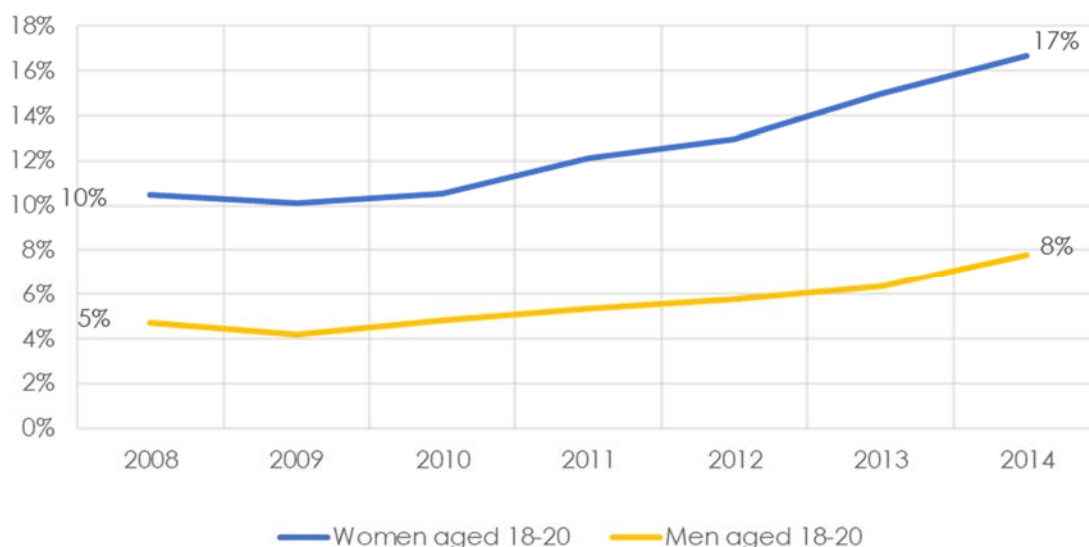
increased by more than 30% across all racial/ethnic gender subgroups.

At the same time, disaggregate NCHA data demonstrate wide racial/ethnic disparities in the receipt of an anxiety diagnosis in the past year (Figure 5). For example, the diagnosis rates in women range from 5.93% among Asian or Pacific Islander students to 16.3% among White students. Black male students and Asian or Pacific Islander male students received the lowest rates of anxiety diagnoses of any group, at 3.54% and 3.5% respectively. These rates corroborate many studies that have been conducted over the past couple of decades showing racial/ethnic disparities in mental health care received, particularly for Black and Hispanic populations.

Our final report will delve into why certain racial/ethnic and gender populations are disproportionately at risk, and will examine the barriers to diagnosis and treatment that many groups face.

**Anxiety is not only increasing, but it is also growing at a rate faster than depression and all mental health disorders combined.**

**Figure 4: Past year anxiety diagnosis among 18-20 year olds by gender among NCHA student respondents**



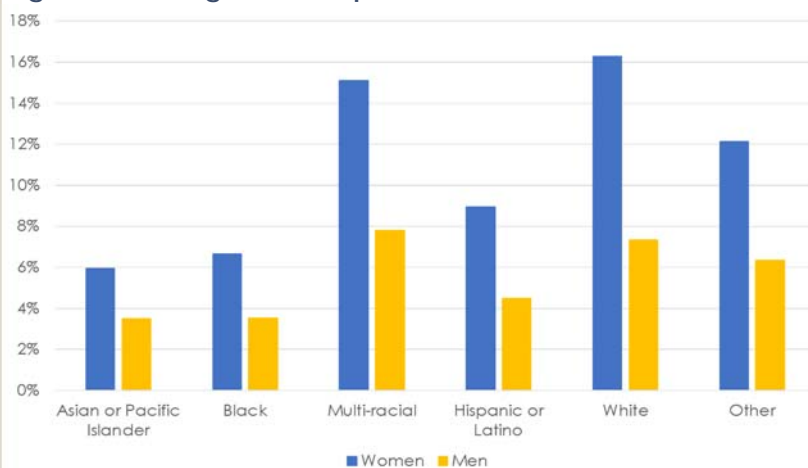
Source: National College Health Assessment, 2008 - 2015 (N = 727,162)

## What is driving the spike in anxiety? Why are students and Millennials, and some gender and racial/ethnic groups within these cohorts, disproportionately and increasingly at risk?

To date, research illustrates that poor mental health is associated with material disadvantage and unemployment, income, debt, educational attainment, and parental education.<sup>8,9,10</sup> Existing literature also points to several potential factors contributing to this spike in anxiety. They include but are not limited to: economic and financial stressors,<sup>11,12,13</sup> technology, social media and internet use,<sup>14,15</sup> sociopolitical factors, and student life in the U.S. higher education setting.<sup>6,7</sup>

As next steps, we will dive deeper into these determinants and examine the nuances among potential driving forces. Our final report will provide insight into why reported anxiety among millennials and college students continues to grow, illustrating that the increase is not solely attributable to changes in the detection of anxiety or stigma surrounding mental health. We will also evaluate the resulting economic costs, including the impact on productivity and academic performance, and propose effective policy solutions to address this mental health crisis.

**Figure 5. Past year anxiety diagnosis by race/ethnicity and gender among NCHA respondents, 2008 – 2014**



Source: National College Health Assessment, 2008-2015 (N = 727,162)

<sup>1</sup> Kessler RC, Petukhova M, Sampson NA, Zaslavsky AM, Wittchen H-U. Twelve-month and lifetime prevalence and lifetime morbid risk of anxiety and mood disorders in the United States. *International journal of methods in psychiatric research*. 2012;21(3):169-184. doi:10.1002/mpr.1359.

<sup>2</sup> Ibid.

<sup>3</sup> 2017 Annual Report [Internet]. Center for Collegiate Mental Health; 2018 Jan p. 42. Report No.: STA 18-166. Available from: [https://sites.psu.edu/ccmh/files/2018/02/2017\\_CCMH\\_Report-1r4m88x.pdf](https://sites.psu.edu/ccmh/files/2018/02/2017_CCMH_Report-1r4m88x.pdf)

<sup>4</sup> Emily Tate. Anxiety on the Rise [Internet]. Inside Higher Ed. 2017 [cited 2018 Apr 10]. Available from: <https://www.insidehighered.com/news/2017/03/29/anxiety-and-depression-are-primary-concerns-students-seeking-counseling-services>

<sup>5</sup> David R. Reetz, Carolyn Bershad, Peter LeViness, Monica Whitlock. 2015 AUCCCD Annual Survey [Internet]. The Association for University and College Counseling Center Directors; 2016. Available from: <https://www.aucccd.org/assets/documents/aucccd%202016%20monograph%20-%20public.pdf>

<sup>6</sup> Diagnosis and treatment in the NCHA is self-reported by respondents.

<sup>7</sup> The overall rate was adjusted to represent the true distribution of males and females within national enrollment in degree-granting institutions in the U.S.

<sup>8</sup> Merikangas KR, He J, Burstein M, Swanson SA, Avenevoli S, Cui L, Benjet C, Georgiades K, Swendsen J. Lifetime prevalence of mental disorders in U.S. adolescents: Results from the National Comorbidity Study Adolescent Supplement (NCS-A). *J Am Acad Child Adolesc Psychiatry*. 2010 Oct;49(10):980-989.

<sup>9</sup> NCS-A Lifetime and 12M prevalence estimates, National Comorbidity Survey (NCS) at Harvard Medical School Website, 2005. <https://www.hcp.med.harvard.edu/ncs/>.

<sup>10</sup> Fryers T, Melzer D, Jenkins R, Brugha T. The distribution of the common mental disorders: Social inequalities in Europe. *Journal of Public Mental Health*. 2005;1(14) page numbers: 1-12.

<sup>11</sup> Lemstra M, Neudorf C, D'Arcy C, Kunst A, Warren LM, Bennett NR. A systematic review of depressed mood and anxiety by SES in youth aged 10-15 years. *Can J Public Health*. 2008 Mar-Apr;99(2):125-9.

<sup>12</sup> Karsten, I. Paul, Klaus, Moser. "Unemployment impairs mental health: Meta-analyses."

University of Erlangen-Nuernberg, Organizational and Social Psychology, Lange Gasse 20, 90403 Nuernberg, Germany January 2009.

<sup>13</sup> Mucci N, Giorgi G, Roncaioli M, Fiz Perez J, Arcangeli G. The correlation between stress and economic crisis: a systematic review. *Neuropsychiatric Disease and Treatment*. 2016;12:983-993.

<sup>14</sup> Seabrook, E. M., Kern, M. L., & Rickard, N. S. Social Networking Sites, Depression, and Anxiety: A Systematic Review. *JMIR Mental Health*, 3(4), e50. 2016.

<sup>15</sup> Thomee, S., Harenstam, A., & Hagberg, M. Mobile phone use and stress, sleep disturbances, and symptoms of depression among young adults - a prospective cohort study. *BMC Public Health*, 11(1), 66-76. 2011.

<sup>16</sup> Twenge, J. M., Gentile, B., Nathan, C., Ma, D., Lacefield, K., & Schurtz, D. R. (2010). Birth cohort increases in psychopathology among young Americans, 1938-2007: A cross-temporal meta-analysis of the MMPI. *Clinical Psychology Review*, 30, 145-154.

<sup>17</sup> Song, Hong. "The cost of attending an elite college." School of Economics, Fudan University, 600 Guoquan Road, Shanghai 200433, China. Received 6 February 2017, Available online 6 August 2017.

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