



The Rise of Anxiety Among the College Age Population

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Introduction

Anxiety is a mental illness that comes in various magnitudes of severity. The college student population is one that is often looked for how often they experience the symptoms. We hypothesized that nearly all students experience periods of their academic life where they have anxiety, but those that are aware of their anxiety are the ones that are willing to cope with it in a healthy manner.

The article, *Replacing Stressful Challenges with Positive Coping Strategies: A Resilience Program for Clinical Placement Learning* (Delaney, C., 2015) explains how there is an increased stress among students and that not many of them know how to effectively manage their anxiety. The researchers also explain that with an increased anxiety level and decreased coping strategies, it can interfere with how students are able to learn and focus on the material at hand. What this particular research study suggested was that "replacing stressful challenges with positive coping strategies [which] offers a potentially powerful tool to build self-efficacy and cognitive control as well as greater self-awareness as a learner" (Delany et al., 2015).

Throughout this study, we will be researching how college-aged and young adults deal with their anxiety weather it is severe or minor. There are a lot of different ways people could interpret what anxiety is. For our projects purpose, the definition of anxiety as explained by the CDC and Dbsalliance.org, is your mind and body's natural response to events that are threatening as well as having excessive and unrealistic worry about everyday tasks or events. The research we will be conducting will fill a gap in the current research by comparing anxiety levels among men and women as well as how these individuals treat their anxiety and cope with it on an everyday basis and what sort of triggers could potentially bring out their anxiety symptoms. The goal of this study is to examine how often college students are experiencing symptoms of anxiety and to see how they are coping with it in order to get a sense of how to make life a little less stressful for these students.

Methods

Participants

In this cross sectional study students at Dominican University of California and other college aged students, were asked to complete a survey about their demographics, thoughts on stress and anxiety, and their mental health while being a college student. Participants were informed about the survey through a link as well as receiving emails, kindly asking to take part in the study. The study was conducted between January 2017 and March 2017. We also analyzed the results from the 2015 BRFSS questionnaire, which is a large national database that gets administered to people of the country every year.

Measure

For the 2015 BRFSS questionnaire, we were able to pull out all questions that participants explained about their sex, smoking status, alcohol behaviors having good or bad mental health days, weather or not they have ever had a depressive disorder, how often they get physical exercise, sleeping patterns, and the amount of anxiety they experience. All of these different questions gave us a large range of different variables that could potentially be hindering college student's mental health, therefore making them experience anxiety on a regular basis.

Within our survey, the researchers asked the students to complete very similar questions that were in the BRFSS questionnaire. Some of the questions included general demographics such as sex, age, grade level, county of residence as well as health behaviors they engage in regularly, such as smoking, drinking, exercising, and overall feelings of stress and anxiety. We administered the survey using a link through Survey Monkey and the responses were kept confidential and anonymous.

Study Design

The survey was sent out via email to the students of Dominican University of California as well as through our Facebook profiles. We decided on what questions to ask by researching previous studies that were done on mental health in college students as well as got ideas of what to ask after analyzing the BRFSS dataset. We wanted to know if college students were constantly thinking about assignments that they needed to get done a well as other stressors they had in their life.

Methods Continued

Statistical Analysis

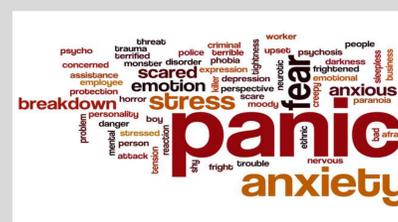
We started off analyzing the results of both BRFSS and the survey in a program called SPSS. We first analyzed two of the questions in BRFSS to see if they were statistically significant. To see if this is true we used descriptive statistics and put the questions in a crosstab by doing Chi-squared tests. We then did the same process for the survey. We first had to code all of the responses from our survey and insert them into SPSS.

Results

We first compared a person's smoking status with a depression index. What we found was if a person was an active smoker, they are more likely to be depressed (0.44%) as compared to those that were not smokers were not as likely to be depressed (.037). These results were statistically significant with a p value of (<.001). We also compared alcohol drinks consumed per day with having a depressive disorder. We found that people who drink a certain amount of alcoholic drinks per day are more likely to have a depressive disorder (.013%) compared to those who do not have a depressive disorder (.005). There is a statistical difference between those that drink alcohol every day versus those that do not. Lastly, we compared ones satisfaction in life with the amount of poor mental health days a person had in the past 30 days. We found that those that are more satisfied with their life had fewer poor mental health days (.129%) and those that were not as satisfied with their life typically had more poor mental health days (.383), which were both statistically significant with a p value of (<.001).

One hundred and sixty four students completed the survey (Table 1). Each student was only allowed to take the survey once. There were more Females (81.5%) than males (16.1%) as well as a majority of Senior's (52.4%) and 21+ year olds (67.3%) that completed the survey. Given prior studies of gender differences in reported anxiety levels, we researched if these differences were true among college students. We first analyzed the results given from BRFSS and found that at a national level, females (22%) are more likely to be depressed than males (14%) are, which had a p-value of (.001) which is statistically significant. Given that females are more prone to develop depression, we then looked to see if this was true at a local level, specifically among the college students. We were able to analyze four different components (Table 2) of anxiety levels and found that there was no statistical significance among any of the categories between males and females.

Variable	N (%)
Gender	
Male	27 (16.1)
Female	137 (81.5)
Age	
18	14 (8.3)
19	18 (10.7)
20	21 (12.5)
21+	113 (67.3)
Class Level	
Freshman	21 (12.5)
Sophomore	17 (10.1)
Junior	24 (14.3)
Senior	88 (52.4)
Fifth year/ other	15 (8.9)
City	
San Fran	24 (14.3)
Oakland	3 (1.8)
Daly City	4 (2.4)
San Jose	20 (11.9)
Sacramento	29 (17.3)
Other	86 (51.2)



Demographics	Total	Male	Female	P value
Age, 21+	113 (67.3)	17 (63.0)	94 (68.0)	0.527
Caffeine	82 (49.4)	16 (59.3)	65 (47.4)	0.533
Alcohol as a stress reliever	45 (27.1)	7 (25.9)	38 (27.7)	0.674
Getting enough sleep	36 (21.7)	6 (22.2)	29 (21.2)	0.616
Anxiety				
Feeling overwhelmed	126 (75.9)	24 (88.9)	101 (73.7)	0.167
Upsetting thoughts	81 (48.8)	12 (44.4)	69 (50.4)	0.325
Not accomplishing tasks	74 (60.7)	11 (50.0)	61 (62.2)	0.294
Feeling nervous/anxious	64 (39.0)	7 (25.9)	56 (41.5)	0.303

Discussion

•We hypothesized that nearly all student's experience symptoms of anxiety to some degree, but those that are more aware of their anxiety have learned to cope with it in a healthy manner that is effective for them. We found that mostly all students do experience anxiety but they all don't cope with it in the healthiest of manners. Some turn to alcohol as well as not getting enough hours of sleep.

•We also found that there is a gender difference among males and females as to who is more likely to experience anxiety symptoms. In an article called *Gender differences in anxiety disorders and anxiety symptoms in adolescents*, it talks about how "there was a preponderance of females among current and recovered anxiety disorder cases, but not among those who had never experienced an anxiety disorder. The female preponderance emerges early in life, and retrospective data indicate that at age 6, females are already twice as likely to have experienced an anxiety disorder than are males." (Lewinsohn, P., 1998) In another article called, *Brave men and timid women? A review of the gender differences in fear and anxiety*, it explains how there is "substantial evidence [that] indicates that women report greater fear and are more likely to develop anxiety disorders than men. Women's greater vulnerability for anxiety disorders can be partly understood by examining gender differences in the etiological factors known to contribute to anxiety." It is evident not only through our study but also through examining the results from BRFSS that there is a distinct difference in gender both emotionally and biologically that indicates that women are more likely to experience anxiety and depression than men tend to.

•In summary, we found that there is a gender difference with anxiety and depression and that women are more prone to experience these mental illnesses. We also found a multitude of variables that play either a positive or negative role in the symptoms of anxiety and depression. Those that smoke or drink alcohol regularly are statistically more likely to develop depression. Although there was a positive relation between smoking and alcohol with depression, there is no statistical significance between them and anxiety. We also found that the amount of time a person focuses on upsetting thoughts or situations in their life will statistically affect a person not being able to get tasks done. These results can help students realize what is potentially contributing to their anxiety and offer ways as to how to better cope with their symptoms and emotions. Moreover, students will realize that having anxiety is a normal thing to experience as a college student and that they are not alone. Overall, this study highlights the high rates of anxiety among college students and the different variables that play into this mental health issue.

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