

Predictors of Anxiety in an Ethnically Diverse Urban University Population

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Abstract

Background: According to the American College Health Association (2018) a survey taken by 19,664 college students within the US depicted that 63% of college students felt overwhelming anxiety at some point within the last year. Therefore, we examined predictors of anxiety among the San Jose State University (SJSU) student population.

Methods: We recruited 368 study participants via flyers, email, personal connections, and social media, who provided information using a survey questionnaire on predictors including transfer status, nativity, everyday experiences of discrimination, and diet. We used simple logistic regression to determine the odds of anxiety for each predictor. All statistical tests were double-sided.

Results: We found that 36 % of college students attending San Jose State University screened positive for anxiety using the GAD-7 scale. Everyday experiences of discrimination, identifying as female, and students majoring in the colleges of business or engineering were positively associated with anxiety, and being born outside the United States was negatively associated with anxiety. In the multivariable model, everyday experiences of discrimination remained significantly associated with screening positive for anxiety as well as female gender.

Project Activities

- **Aim 1:** Describe the prevalence of anxiety in college students at SJSU
- **Aim 2:** Describe the predictors of anxiety within the San Jose State University student population
- We recruited participants via flyers posted on campus, personal connections, student clubs, the SJSU Athletic Center, Instagram, school email, classes, etc.
- Anonymized data were collected via a Qualtrics survey distributed to students
- We used logistic regression to examine the association between key student variables including transfer status, fruit, vegetable, and meat consumption, ethnicity, nativity, sexual orientation, gender, BMI, age, field of study, and everyday experiences of discrimination
- This project was approved by the SJSU Institutional Review Board

Results

Table 1. Characteristics of Survey Participants

Total number of participants	368	Sexual Orientation	
Positive screen for Anxiety, n (%)	133 (36)	Heterosexual	321 (87)
Age, years	22 (3.1)	LGBTQ	28 (8)
Body mass index, kg/m ²	23.8 (4.5)	Transfer Status	
Gender		Non-transfer student	163 (44)
Female	208 (57)	Transfer student	187 (51)
Male	108 (29)	College at SJSU	
Ethnicity		Business	92 (25)
Asian	167 (45)	Education	10 (3)
Black	14 (4)	Engineering	20 (5)
Hispanic/Latino	82 (22)	Health and Human Sciences	172 (47)
White	48 (13)	Humanities and the Arts	16 (4)
Other	39 (11)	Professional and Global Education	6 (2)
Nativity Status		Science	17 (5)
Born in the United States	252 (69)	Social Sciences	17 (5)
NOT born in the United States	98 (27)	Every day discrimination score of median and above	185 (50)

Values of continuous variables are means (standard deviations)
 Values of categorical variables are numbers (percentages)
Values do not add up to 100% because of missing data

Results, Cont.

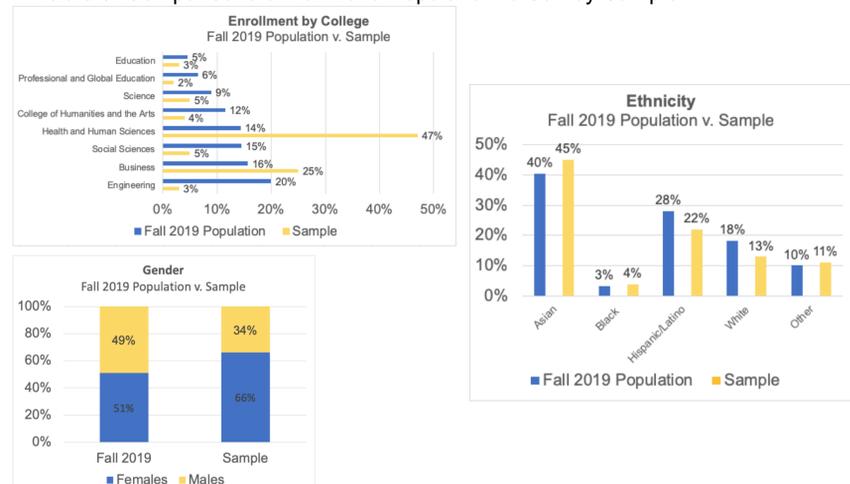
Table 2. Crude and Adjusted Odds Ratios (95% Confidence Intervals) for Positive Anxiety Screen

Variable	Crude OR (95% CI*)	Adjusted OR (95% CI*)
Everyday Discrimination Score	2.78 (1.79-4.33)	1.9 (1.15-3.14)
Male gender	0.36 (0.21-0.61)	0.48 (0.26-0.88)
Non-US born	0.56 (0.34-0.93)	0.67 (0.36-1.22)
College		
Business	0.33 (0.19-0.59)	0.53 (0.27-1.03)
Education	0.48 (0.12-1.92)	0.47 (0.11-1.97)
Engineering	0.28 (0.09-0.88)	0.83 (0.23-2.95)
Health and Human Sciences	Reference	Reference
Humanities and the Arts	1.12 (0.4-3.13)	1.28 (0.44-3.78)
Professional and Global Education	0.56 (0.1-3.15)	0.95 (0.14-6.45)
Science	1 (0.37-2.71)	1.75 (0.56-5.43)
Social Sciences	0.61 (0.22-1.73)	0.53 (0.17-1.64)

*Confidence Interval
 **Adjusted for all significant variables in the model
 *** Bolded if statistically significant

Results, Cont.

Table 3. Comparisons of Fall 2019 Population to Survey Sample



Key Findings and Next Steps

- In a multivariate model, gender, and everyday discrimination scale scores that are at the median or above are significant predictors of anxiety
- Next steps: Recruit additional participants and finalize analyses.

Citations

- American College Health Association. American College Health Association-National College Health Assessment II: Undergraduate Student Reference Group Data Report Fall 2018. Silver Spring, MD: American College Health Association; 2018.
- Office of Institutional Research. (2019). University Snapshot. Retrieved from <http://iea.sjsu.edu/>

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