

# Undergraduate Major as a Predictor of Generalized Anxiety Disorder

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## INTRO

- Discover a relationship between Generalized Anxiety Disorder (GAD) and undergraduate major.

## METHODS

- Online survey was created which featured basic academic questions and Penn State Worry Questionnaire (PSWQ)
- Undergraduate students who currently attended the University of New Haven were emailed the survey
- One Way Analysis of Variance, and Post Hoc test were ran to compare categorized majors to their respective PSWQ scores.

## RESULTS

- Analysis of Penn State Worry Questionnaire (PSWQ) scores suggested undergraduate students exhibited moderate levels of anxiety (Mean= 57.70).
- Music & Fine arts majors exhibited the highest level of anxiety, falling under the high worry category.
- Engineering, Mathematics, & Technology majors exhibited the least levels of anxiety, placing into the moderate worry category.
- ANOVA test results were found to be statistically significant ( $P=.017<.05$ ). Suggesting there were differing mean PSWQ test scores among major groupings.
- Statistically significant comparison between Music & Fine Arts and Engineering, Mathematics & Technology Majors was discovered.

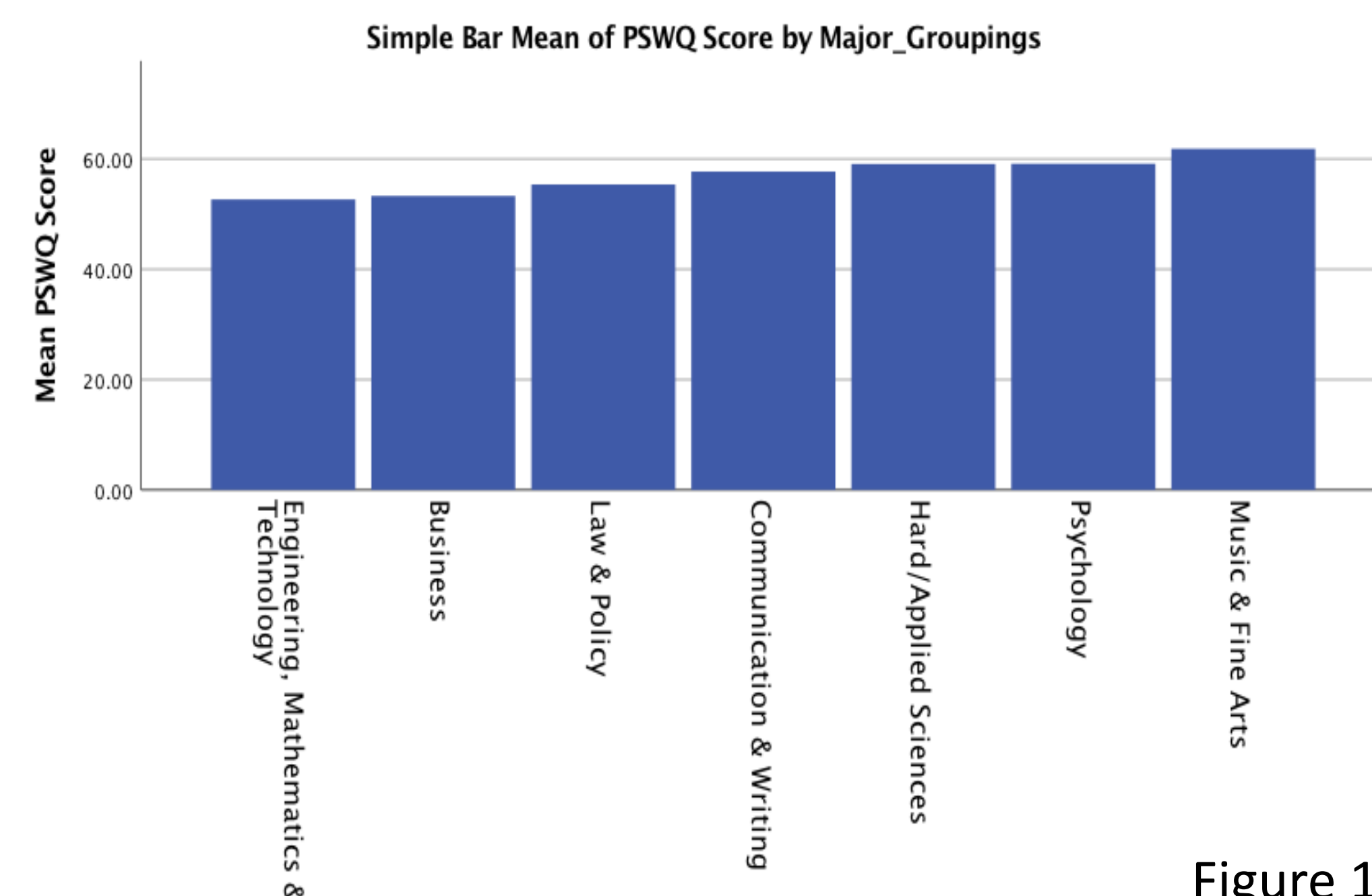


Figure 1.

## DISCUSSION

- Comparisons between Music & Fine Arts and Engineering, Mathematics, & Technology were the only values found to be statistically significant ( $P=.039$ ).
- Overall results suggest the average University of New Haven student may suffer from moderate anxiety rates.
- Further research could reveal factors for anxiety rates among each major grouping.



University of  
New Haven

*College of Arts and Sciences  
Department of Psychology*

Choice of  
undergraduate major  
helps predict symptoms of  
generalized anxiety  
disorder...

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## The Specifics:

The several groupings of academic majors were as follows: Psychology (Mean= 59.13, SD=12.9,  $n= 76$ ), Communication & Writing (Mean= 57.71, SD= 13.74,  $n=28$ ), Engineering, Mathematics, & Technology (Mean= 52.64, SD= 13.9,  $n= 39$ ), Law & Policy (Mean= 55.37, SD= 13.19,  $n= 46$ ), Business (Mean= 53.29, SD= 15.59,  $n= 21$ ), Hard/Applied Sciences (Mean= 59.09, SD= 12.39,  $n= 89$ ), Music & Fine Arts (Mean=61.83, SD= 11.73,  $n= 40$ ). Major groupings which displayed the highest levels of anxiety were: Music & Fine Arts (Mean= 61.83), and Psychology (Mean= 59.13). Conversely, groups which exhibited the least levels of anxiety were: Engineering, Mathematics, & Technology (Mean= 52.64), and Business (Mean= 53.29).

The Gabriel Post Hoc test revealed a statistical difference between Music & Fine arts (Mean= 61.83,  $P=.039$ ) and Engineering, Mathematics, & Technology (Mean= 52.64,  $P=.039$ ) - with the latter experiencing higher levels of anxiety. The results of the Hochberg test provided similar values to Gabriel's, suggesting only the comparison between Music & Fine Arts and Engineering, Mathematics, & Technology were statistically significant ( $P=.039$ ). Other comparisons found in both tests had values too high for statistical significance, suggesting these values may be due to chance.

## Penn State Worry Questionnaire Scoring:

16-39: Low Worry  
40-59: Moderate Worry  
60-80: High Worry

## Categorization of majors

<b>Group 1: Psychology</b>		<b>Group 2: Communication &amp; Writing</b>	
Forensic	31	TV/Video Production	6
Community	6	Communications	13
General	39	Journalism	1
<b>Total</b>	<b>76</b>	English	8
		<b>Total</b>	<b>28</b>
<b>Group 3: Engineering, Mathematics &amp; Technology</b>		<b>Group 4: Law &amp; Policy</b>	
Chemical	6	Legal Studies	8
Civil	6	Criminal Justice	20
Computer	3	International Dev. & Diplomacy	1
Industrial/systems	3	Marine Affairs	6
Electrical	2	Political Science	5
Mechanical	10	National Security	6
Computer Science	5	<b>Total</b>	<b>46</b>
Cybersecurity	1		
Mathematics	4		
<b>Total</b>	<b>40</b>		
<b>Group 5: Business &amp; Mathematics</b>		<b>Group 6: Hard/Applied Sciences</b>	
Sports Management	2	Biology	14
Business Management	4	Bio pre-med/vet	13
Accounting	5	Genetics and Biotech	5
International Business	2	Marine Bio	19
Business	3	Environmental Science	4
Marketing	2	Biology-Biochem	2
Finance	1	Cellular and Molecular Bio	1
Economics	2	Health Sciences	1
<b>Total</b>	<b>21</b>	Dental Hygiene	5
		Nutrition & Dietics	1
		<b>Total</b>	<b>89</b>
<b>Group 7: Music and Fine Arts</b>		<b>Categories to be excluded</b>	
Music and Sound Recording	10	Undecided	5
Music	2	History	2
Music Industry	13	Open-Ended Response	1
Theater	1	Fire Science/ Arson investigation	1
Graphic Design	2	<b>Total</b>	<b>9</b>
Interior Design	12		
<b>Total</b>	<b>40</b>		