

## Introduction

Addressing issues relating to mental health is of ever-increasing importance, particularly among university students. Prior focus has been on university undergraduate populations, leaving gaps in the research conducted on graduate students. Graduate students report above average stress, higher levels of depression and anxiety, and greater feelings of hopelessness and suicide compared to the general population. Students face intense academic and financial stressors with additional factors such as family planning and limited social support.

**The objective of this study is to identify and evaluate trends in the utilization of mental health services at a large public university from 2015-2021 and to further evaluate the effect of the Covid-19 pandemic on utilization.**

## Data Source and Analysis Methods

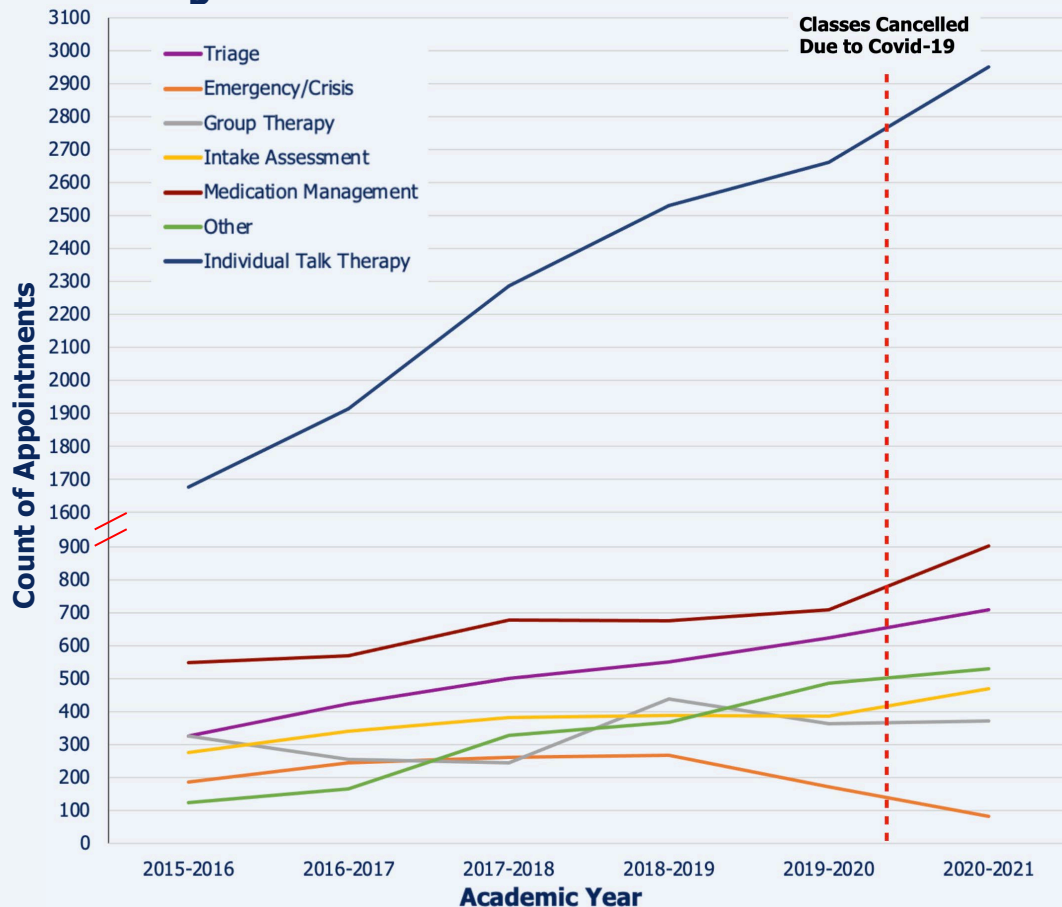
- Student health data was linked with enrollment data to provide a comprehensive, deidentified dataset of students who sought counseling and psychological services (CAPS) care at a Department of Student Health and Wellness (SHW) center from 2015–2021.
- Overall University graduate data was obtained from the Institutional Research and Analytics databases; counts were averaged across academic years 2015-2021.
- Chi-square tests using SAS (v9.4) were performed to calculate differences in student utilization of CAPS.
- The “other” category for race/ethnicity in Table 1 include American Indian/Alaskan Native and Pacific Islander/Native Hawaiian race/ethnicities.
- Academic years are defined as August 1 to July 30 of each respective year; pandemic years were identified as from 3/11/20 onward.
- Services listed as “other” in Figure 1 include care management and consultations.

## Results

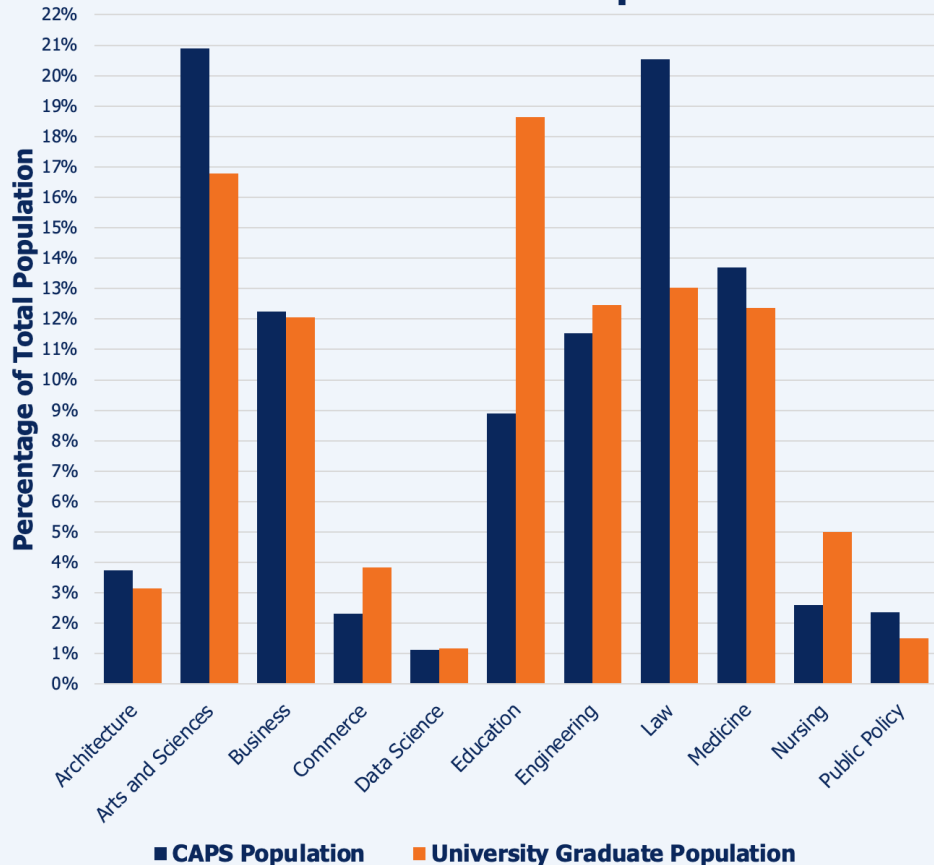
**Table 1: Demographic Data Compared to Overall Graduate Population**

Characteristics	CAPS Population (N=3,708)	Overall Population (N=7,769)	Chi-Square
<b>Sex</b>	<b>N (%)</b>	<b>N (%)</b>	$\chi^2=81.892, p<.0001$
Female	2246 (60.57%)	4007 (51.58%)	
Male/Other	1462 (39.43%)	3762 (48.42%)	
<b>Race/Ethnicity</b>			$\chi^2=11.68, p=0.0696$
White	2177 (58.71%)	4452 (58.60%)	
Non-Resident Alien	611 (16.48%)	1447 (18.62%)	
Asian	261 (7.04%)	499 (6.43%)	
Black/African American	220 (5.93%)	414 (5.33%)	
Hispanic	199 (5.37%)	379 (4.88%)	
Other/Unknown	127 (3.43%)	246 (3.16%)	
Multi-Race	113 (3.05%)	232 (2.98%)	
<b>International Status</b>			$\chi^2=0.111, p=0.7392$
Not International	3026 (81.61%)	6320 (81.35%)	
International	682 (18.39%)	1449 (18.65%)	

**Figure 1: Service Utilization Over Time**



**Figure 2: Utilization by Program Compared to Overall Graduate Population**



## Discussion and Conclusion

- 28,685 appointments were made by 3,708 distinct students.
- Relative to the university population, females constituted a significantly higher percentage of CAPS students (60.6% vs. 51.5%,  $p<0.01$ ). This is consistent with literature indicating that women are more likely to utilize mental health services.
- There was a significant ( $p<0.01$ ) increase in individual talk therapy appointments as well as a significant ( $p<0.001$ ) decrease in emergency/crisis appointments during the pandemic.
- Individual talk therapy represents the largest segment of service utilization, followed by medication appointments.
- Arts and Sciences, Law, and Medicine were the programs that saw the most utilization of CAPS.
- Next steps for this study involve further investigating why specific cohorts of students are more or less likely to utilize services.