

# Impact of an Art Therapy Interventions and Wellness Programs on Graduate Pharmacy Students' Mental Health

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## BACKGROUND

### Background

- Healthcare professionals and students are more stressed than other demographics and have higher rates of mental illness<sup>1,2</sup>
- Wellness and resilience has become an important shift in healthcare in order to prevent burnout
- Research on expressive arts therapy in healthcare professional students for stress relief is limited<sup>3</sup>

## OBJECTIVE

- Describe the effect of a hybrid resilience and wellness program on stress and mental health parameters among pharmacy students
- Evaluate which aspects of the program are most effective for use in improving stress and mental health parameters

## METHODS

### Methods

- Survey-based prospective study. Survey based off of the validated Perceived Stress Scale (PSS)<sup>4</sup>
- PSS scores are categorized as:
  - High stress (score >26)<sup>4</sup>
  - Moderate stress (score 14-26)<sup>4</sup>
  - Low stress (score <14)<sup>4</sup>
- The post-survey included additional questions regarding student perceptions of the impact of the various interventions, based on a 5-point Likert type scale, from strongly disagree to strongly agree
- Wellness programs:
  - Well-being and resilience programming (in-person and virtual) offered throughout Spring 2021 semester
  - Art therapy intervention initiated March 2021
- Pre- and post-surveys were sent at the beginning and end of the Spring 2021 semester to all didactic students (professional years 1-3)
- The post-survey was also distributed after the art therapy event for students in attendance

### Data Analysis

- Carried out via IBM SPSS 27
- Descriptive statistics and frequencies run on all collected data and student responses

## RESULTS AND TIMELINE

Baseline demographic characteristics				
Subgroups	Pre Survey		Post-Survey 1	
	n	n%	n	n%
Pharmacy students	N= 65	--	N= 14	--
P1's	20	30.8%	4	28.50%
P2's	23	35.4%	6	42.80%
P3's	22	33.8%	4	28.50%
Female	43	66.2%	7	50%
Male	22	33.8%	7	50%

Figure 1. Post-Survey Wellness vs. Art Therapy Averages

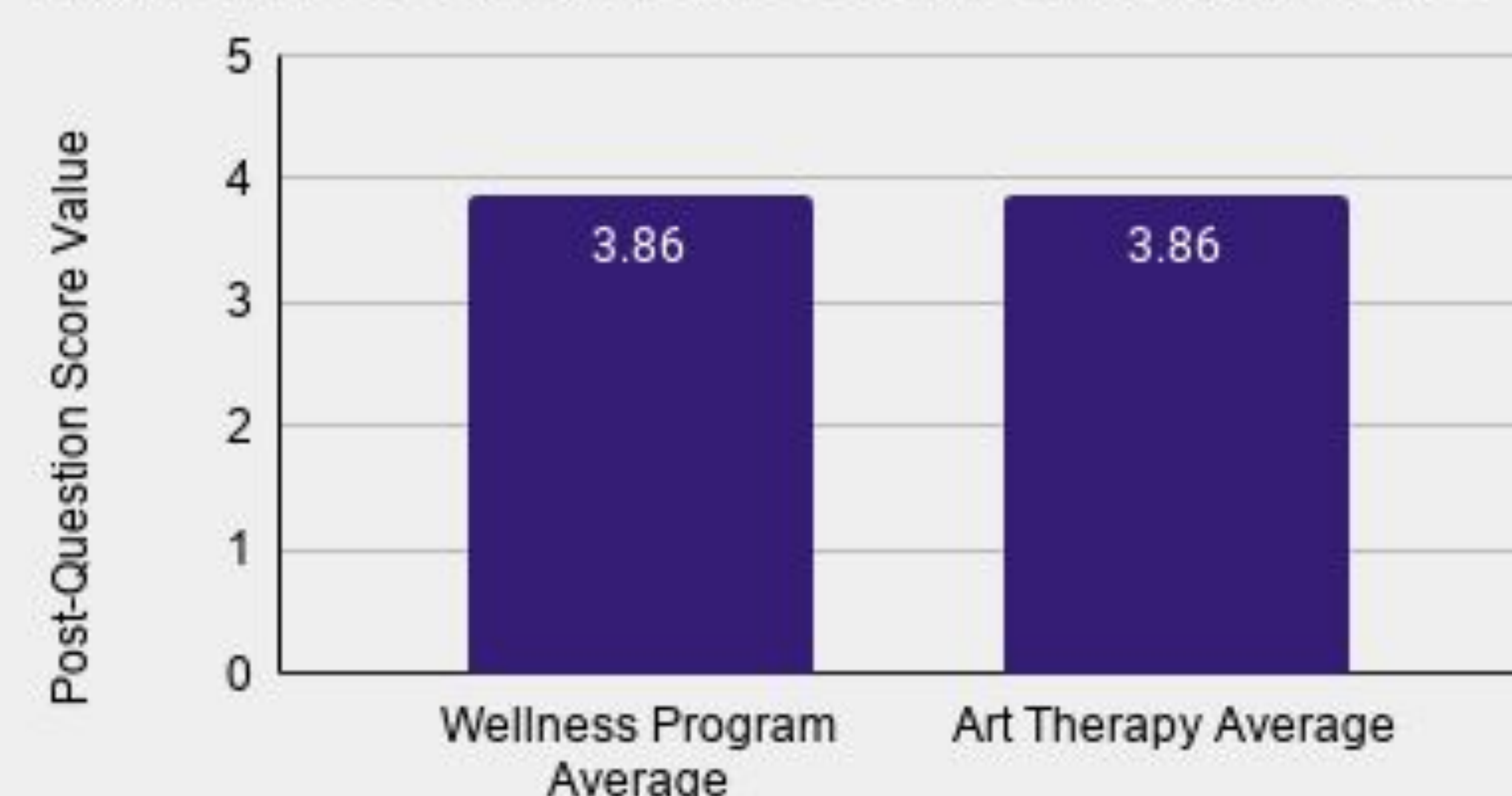
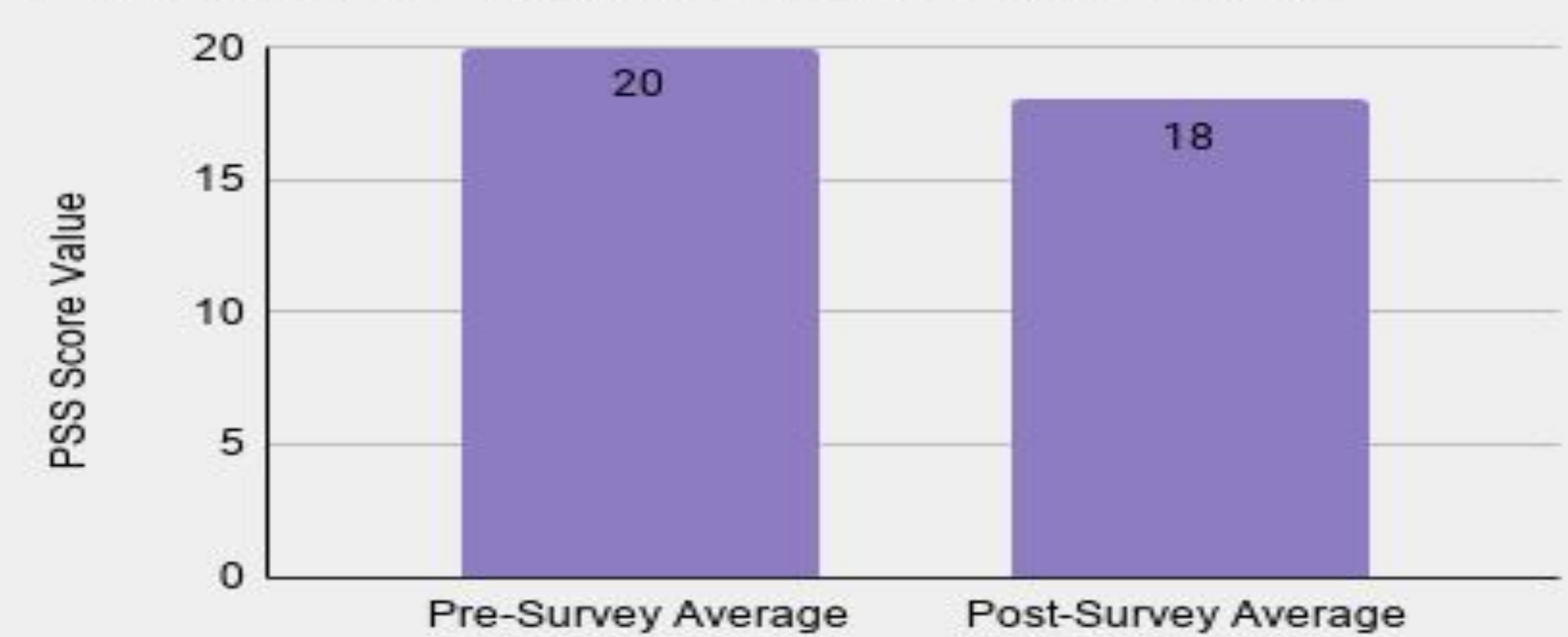


Figure 2. PSS Pre- and Post-Survey Averages



### Beginning of Spring 2021 Semester

Pre-survey sent out to all students assessing stress by using the PSS-10 scale. Initial Wellness and Resilience Programming started.

### Early Spring 2021 Semester

Hybrid and in-person wellness/resilience campaigning begins for students in both in-person and online learning modalities.

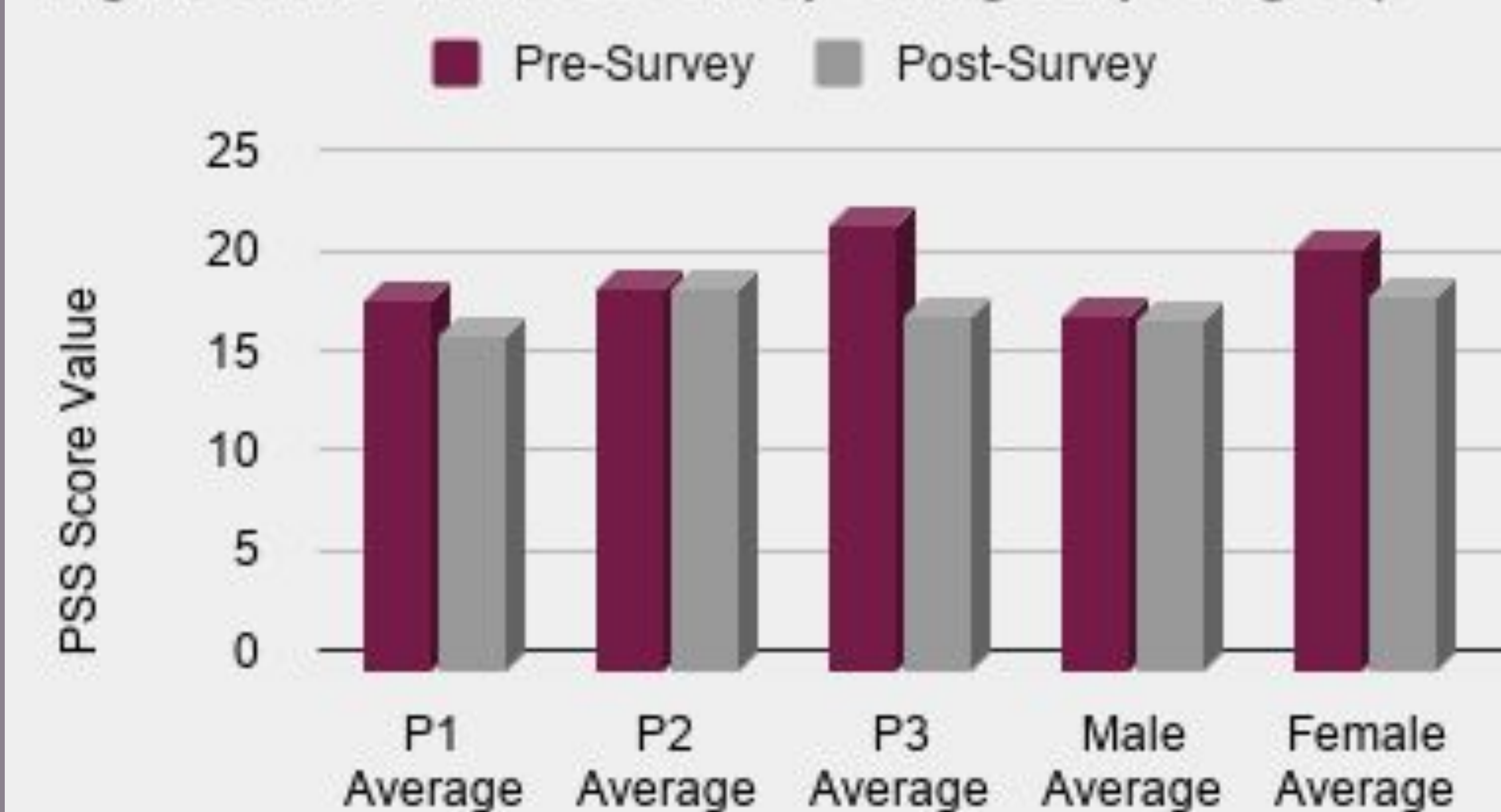
### Mid-Late Spring 2021 Semester

Art Therapy intervention and Wellness/Resilience Spring Break Week initiated on campus for students. Post-survey sent to students who participated in the Art Therapy Intervention.

### End of Spring 2021 Semester

Final post-survey to be submitted to assess pre- and post-PSS data after full implementation of wellness/resilience programming.

Figure 3. Pre- and Post-Survey Changes by Subgroup



## RESULTS CONTINUED

- Subgroup changes include the following, which is also depicted in Figure 3:
  - P3 students averaged 22.2 before the intervention, and 19.5 afterward, with a change of 2.7.
  - P3 students averaged higher than all other students in both surveys, and P1 students average lowest in both surveys
  - Female students averaged 21.2 before the intervention, and 18.6 afterward, with a change of 2.6.
- In the likert-based survey on perception of impact, the student mean for all 5 questions was 4, implying they agreed that the art therapy and wellness interventions were helpful for stress/mental health

## DISCUSSION AND CONCLUSIONS

### Discussion

- Pharmacy students benefited overall by approximately 2 points on the PSS scale from one art therapy intervention implemented in the middle of the semester.

### Limitations

- Small study at a small pharmacy program
- Stress scores likely affected by COVID-19

### Conclusion

- Art therapy interventions pose as a potentially effective option for pharmacy students experiencing high stress during coursework, etc.

## ACKNOWLEDGEMENTS

- Angela Wilson, Rhonda Anderson, and Amanda Wilson for their efforts for Spring Break week programming
- Professor Cat Mailloux, for conducting the art therapy session
- Cedarville University SCCP Chapter

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