

# Paws and Reflect: Exploring Animal-Assisted Therapy in PA Education

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## Introduction

- Healthcare students, including Physician Assistant (PA) students, face high levels of academic and interpersonal stress, which can contribute to burnout and mental health concerns.<sup>1</sup>
- Animal-assisted therapy (AAT) reduces perceived stress and anxiety in undergraduate and health profession students in as little as a single 15-minute session, though students generally prefer more frequent or consistent interventions.<sup>2,3,4</sup>
- AAT consistently reduces perceived stress more effectively than it reduces physiological stress markers such as salivary cortisol, heart rate, and blood pressure.<sup>2,4,5</sup>
- Students report the greatest benefit from AAT during periods of heightened stress and emotionally challenging coursework, even though few studies assessed optimal timing.<sup>3,5</sup>
- In studies of health profession students, AAT was most welcomed when students had the ability to tailor interaction time and frequency to their individual needs.<sup>3</sup>
- Brief, single-session AAT interventions—15 minutes for students—can meaningfully reduce perceived and physiologic stress, with no evidence that consistent or long term availability is required for effect.<sup>2,4</sup>

**Research Question:** How do PA students perceive Animal Assisted Therapy (AAT) events as a wellness intervention, and what factors influence their effective implementation in educational and clinical settings?

## Learning Objectives

- Identify the value of PA programs incorporating wellness interventions, such as animal assisted therapy, into the curriculum to support student well-being.
- Describe the perspectives of PA students regarding animal-assisted therapy interventions and the frameworks used to implement them.

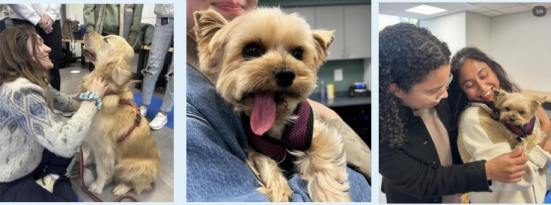
## Methods

### Population and Sample

- Two PA student cohorts in their didactic year from a mid-Atlantic R1 PA program.

### Instruments and Procedures

- Quantitative pilot IRB-approved study (IRB: NCR245537)
- Satisfaction and needs-based surveys used for data collection
- Students who attended an AAT event completed the satisfaction survey. 30 students completed the first survey, 35 students completed the second survey. Surveys included Likert-scale, multi-select, and open-response questions. All program students received the needs-based survey.
- Chi-squared and Cramér's V analysis performed in Microsoft Excel



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## Results

### Quantitative Pilot Study

- Response Rate: 46.9% (30/64 students)
  - Demographics of class: average age 23.8; 89.4% female
- 97% strongly agreed the event was time well spent
- 97% strongly agreed they enjoyed the event
- 83% strongly agreed their mood improved
- 83% strongly or somewhat agreed their anxiety improved
- In open-ended responses, students suggested increasing the dog-to-student ratio, extending session duration, and improving the timing of the intervention; this informed the development of a needs-based survey.



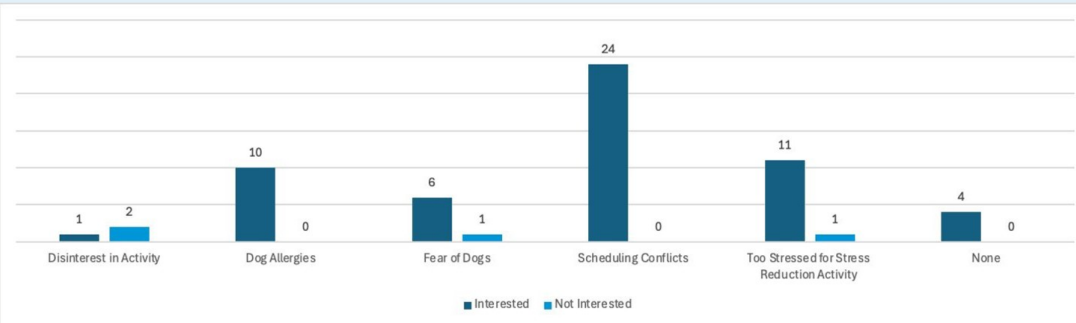
### Needs-based Survey

- Response Rate: 57.4% (35/61 students)
  - Demographics of class: average age 25.1; 83.6% female
- Out of the 35 students who responded to the survey, 45.7% of students reported ever attending a dog therapy event and 91.4% expressed interest in attending stress reduction events such as dog therapy.
- Both groups (those that attended an AAT event and those that did not) the vast majority prefers the free interactions with dogs as the preferred format for future events.
- 82.8% of respondents either agree or strongly agree that incorporating dog therapy would be beneficial for medical providers in managing their stress with 80% of respondents endorsing that they would either definitely or probably advocate for a dog therapy program in their future workplace.
- 68.6% of respondents reported that scheduling conflicts were a potential barrier that might prevent them from attending a dog therapy event.

### Survey Component Responses for AAT Attendees vs Non-Attendees



### Association Between Student Interest in AAT Events and Perceived Participation Barriers



A Chi-squared analysis revealed one significant relationship between interest in participating and reported barriers,  $\chi^2(5) = 20.78$ ,  $p < .001$ , Cramér's V = 0.588.

Among participants interested in Animal-Assisted Therapy (AAT), the most commonly reported barrier was "scheduling conflict" (n = 24).

Those who were not interested cited "disinterest" (n = 2) or "fear of dogs" (n = 1)

## Discussion

### AAT is a Desired and Effective Means of Stress Reduction:

- Students' enthusiasm suggests AAT has immediate, positive effects on emotional well-being during a demanding training period such as PA school, which may be relevant in other graduate training programs.
- Accommodation of Student Schedules and Stress Levels:**
  - Scheduling conflicts were the most commonly cited barrier to AAT participation among interested students, suggesting that event timing should be more intentionally aligned with student availability and preferences.
  - Strategically timed AAT programming could enhance accessibility and impact, especially for those who stand to benefit but are currently excluded due to timing or stress constraints. This may indicate that incorporating AAT into existing schedules as an optional opportunity for stress reduction instead of serving as an additional scheduled obligation would improve engagement.
  - "Too stressed for stress reduction" was a barrier frequently cited by those interested in attending AAT, with many expressing a preference for AAT events during lighter academic periods. This finding contrasts with prior research suggesting AAT is most valued during peak stress and highlights the need to further explore how timing influences student engagement.

### Exposure to and Perceived Benefits of AAT Drives Future Advocacy:

- Students valued the AAT event not only as a personal stress-reduction experience but also as a professionally relevant intervention. This dual recognition underscores the idea that first hand exposure to effective wellness strategies, like AAT, can influence how future clinicians prioritize and advocate for stress-reduction tools in their workplaces.

### Potential AAT Application in Clinical Context:

- AAT may serve as a proactive measure to help PA students develop stress management skills that translate into reduced burnout risk and improved professional well-being.
- The study's insights extend beyond education, providing a framework for incorporating AAT and similar stress-reduction techniques into clinical settings to support healthcare providers.
- Given that scheduling was a major barrier for students interested in participating, similar efforts should be made in clinical environments to intentionally allow flexible time for providers to engage in AAT in order to maximize participation and wellness impact.

**Limitations:** This study is limited by a relatively small sample size, impacting the ability to explore and discuss additional correlational findings. Data was self-reported and collected from a single PA program, which limits generalizability to broader populations. Additionally, future research should aim to correlate student perceptions of AAT with objective measures of stress and anxiety changes to determine whether perceived benefits align with measurable outcomes.

## References

- Sierra T, McCall TC, Brown H, Smith NE. The Role of Interpersonal Toxicity on Healthcare Students' Well-Being. *The Journal of Physician Assistant Education*. 2022;33(3):198. doi:[10.1097/JPA.0000000000000440](https://doi.org/10.1097/JPA.0000000000000440)
- Brisson S, Davis T, Sanders T, Young K. The Impact of a Therapy Dog Team on Medical Students' Physiological Stress and Perceived Anxiety Prior to an Exam. *Journal of Creativity in Mental Health*. 2023;18(3):302-316. doi:[10.1080/15401383.2021.1986186](https://doi.org/10.1080/15401383.2021.1986186)
- Hill M, Mills B, Rogers S, Vance L, Dykstra P, Holmes L. 'Watson' the Wellness Dog: Impact of a Wellness Dog on Emotional Wellbeing in Undergraduate Paramedicine Students. *Australasian Journal of Paramedicine*. 2021;18:1-7. doi:[10.33151/ajp.18.943](https://doi.org/10.33151/ajp.18.943)
- Williams CL, Dagnan E, Miner KM, Sells P. The Effect of an Animal-Assisted Intervention on Physiological Measures of Stress and Anxiety in Graduate Professional Physical Therapy Students. *Open Access Library Journal*. 2018;5(2):1-16. doi:[10.4236/oalib.1104364](https://doi.org/10.4236/oalib.1104364)
- Gebhart V, Buchberger W, Klotz I, et al. Distraction-focused interventions on examination stress in nursing students: Effects on psychological stress and biomarker levels. A randomized controlled trial. *International Journal of Nursing Practice*. 2023;33(3):106111. doi:[10.1016/j.inpr.2023.106111](https://doi.org/10.1016/j.inpr.2023.106111)