

Introduction

- PA students experience significant stress due to the combined pressures of rigorous academics, clinical responsibilities, and financial demands
- When left unmanaged, elevated stress levels can contribute to burnout, depression, and reduced academic performance¹
- Coping strategies are critical in managing stress; adaptive approaches like exercise and social support are linked to improved mental health and academic outcomes²⁻³
- In contrast, maladaptive strategies can worsen stress, while neutral strategies may offer only temporary relief without addressing root causes²⁻³

Purpose

This mixed-methods study explores stress and coping among PA students, examining the impact of adaptive, maladaptive, and neutral strategies to inform efforts that promote resilience, reduce stress, and support student well-being and success in their programs.

References

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Methods

Participants

- In 2022, students completed an online survey upon graduating from their programs
- **1,185 graduating students from 109 PA programs**
- 56.0% of all eligible graduating PA students

Measures

- Students provided free-text responses describing how they coped with stress during PA school.
- Coping strategies were categorized as adaptive, maladaptive, or neutral based on emergent themes.
 - **Adaptive** (e.g., exercise, social support)
 - **Neutral** (e.g., leisure activities like watching television)
 - **Maladaptive** (e.g., substance use, avoidance)
- Each response was coded as **having engaged or not engaged** in each identified coping strategy.
- All students completed the **Perceived Stress Scale (short-form)**.
 - e.g., "In the last month, how often have you felt that you were unable to control the important things in your life?" (1 = Almost never; 4 = Very often)⁴

Analytical Plan

- Qualitative responses were analyzed using grounded theory (open, axial, and selective coding).
- Multiple linear regressions were conducted to investigate whether students' engagement in coping strategies was significantly associated with their perceived stress levels.

Results

Summary Statistics

Perceived Stress Scores					
		<i>n</i>	Range	M	<i>SD</i>
Adaptive strategies	Engaged (1)	1,055	0-14	5.73	2.62
	Did not engage (0)	127	0-15	6.49	2.97
Neutral strategies	Engaged (1)	251	0-13	5.94	2.66
	Did not engage (0)	931	0-15	5.78	2.67
Maladaptive strategies	Engaged (1)	77	0-15	7.35	3.14
	Did not engage (0)	1,105	0-14	5.70	2.60

Model Results

- Interaction terms between coping strategies were not statistically significant, suggesting the effect of one strategy on stress did not depend on the presence of others
 - Interaction terms were removed from the final model for simplicity
- The final regression model was significant
 - $F(3, 1178) = <0.001$, $p < 0.05$
 - Explaining 2.4% of the variance in stress levels ($r^2 = .024$).
- Adaptive strategies: $\beta = -.188$, $P = .538$
- Neutral strategies: $\beta = .125$, $P = .553$
- Maladaptive strategies: Engaged > Did not engage
 - $\beta = 1.556$, $P \leq .001$

Summary

- Coping strategies did not interact, suggesting each strategy's effect on stress is independent of others
- Maladaptive coping strategies were significantly associated with higher stress levels among students
- Adaptive and neutral coping strategies did not show a significant effect on stress levels
- The overall model explained a small but statistically significant portion of the variance in perceived stress

Conclusion

Maladaptive coping significantly contributes to higher stress levels in PA students, whereas adaptive strategies alone may not sufficiently reduce stress. This highlights the need for programs to implement initiatives that directly address maladaptive behaviors. Institutional support remains essential in helping students manage stress effectively. Building on prior research in medical education, future studies in PA should examine how stress and coping vary across student populations to inform strategies that address a range of experiences and needs⁵

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