

Stress in DPT Students: A Qualitative Study

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Background

- Previous research suggests that healthcare students, including Doctor of Physical Therapy (DPT) students, experience high levels of stress.¹
- High levels of stress in students can lead to negative impacts, such as higher incidences of psychosomatic disorders, behavioral issues, and poorer academic outcomes.¹
- To alleviate increased stress levels, students develop both positive and negative coping mechanisms.^{2,3}
- The current literature examining stress in PT students is limited and most commonly involves programs outside of the US and students in bachelor or masters level programs.⁴
- Gaining knowledge about the experience of stress in DPT students, what causes stress, how students cope, and how stress affects student learning has the potential to positively impact curricular design, support services, interventions, and the preparation of students for practice.

Purpose

The purpose of this study was to explore the experience of stress in DPT students, how students manage stress, and the impact of stress on students.

Methods

- Qualitative, cross-sectional, phenomenological study
- Pilot interviews conducted with students not involved in the study to ensure questions were clear and produced rich descriptions
- Semi-structured in-person interviews were conducted by 2 skilled researchers
- Participants were recruited from 3 DPT programs in the Upper Midwest
 - 3 students from each cohort (1st, 2nd, & 3rd years)
 - Total of 27 participants
- Interviews were digitally recorded and transcribed verbatim
- Researchers individually coded the data and collaboratively developed themes
- Methods used to improve psychometric properties:
 - Credibility
 - Triangulation
 - Adequate engagement
 - Skillful interview technique
 - Dependability
 - Member checks and peer review
 - Transferability
 - Rich, thick descriptions

Results

- 13 major themes emerged among 3 primary categories
 - Sources of stress
 - Experience & impacts of stress
 - Coping strategies & stress modifiers

Sources of Stress

- **Academic**
 - **Didactic:** Exams, presentations, group work, schedule disruptions, poorly utilized class time, volume of coursework

“If there's just too many projects going on at school and they're overlapping to the point where you're running around doing a research project over here, but you're supposed to also be doing this group project for a presentation and studying for a test all in the same kind of day or two.”

- **Clinical:** Adjustment to clinical site, relationship with clinical instructor

- **Personal**
 - Having multiple demands/commitments

“I think the best way for me to describe how I was feeling was just stretched...very thin. Because I had one side of me that was pulled to the left,... dealing with, you know, emotions, and trying to still think about my parents, and think about my grandpa, and my family and how they were doing. But then this other side of me was pulled way, way, way to the right.”

- **Financial**
 - Significant debt reported
 - Seen as distant obstacle
 - Not a primary source of stress in DPT school

Experience of Stress

- **Physical:** fatigue, racing heart, muscle tightness, sweating
- **Emotional:** anxiety, altered mood
- **Mental:** inability to concentrate, foggy, scattered thought

“I'd say it's harder to focus, it's harder to be efficient with my time. I feel like it takes me longer to do things.”

- **Changes in stress over time**
 - 1st year students: More stress getting adjusted to the program
 - 3rd year students: More stress regarding licensure exam & career planning

“I think for me, it's changed in that my focus...has changed. So coming into PT school, I was focused on having, you know, I wanted to get 100% on everything. Whether that was exams, or assignments...I went over the top on trying to make everything perfect to- I was focused on grades, basically, is what I was saying. And now that I- as I've gone [through] PT school, my focus has shifted from, like, I still want to maintain the grades, but I want to... prepare myself for the clinic. So it's more of learning how to be a good clinician.”

Impacts of Stress

- **Positive: Motivator**
 - Drives students to perform well & strive for excellence

“...I'm a person that tends to work best under pressure and so I think if I feel like there's absolutely no stress in any area, I'm not as motivated to push myself.”

Impacts of Stress Cont.

- **Negative**
 - Physical: sleeping, eating, & exercise
 - Emotional: relationships
 - Mental: challenges with focusing and retaining information

Coping Strategies and Stress Modifiers

- **Problem-based strategies**
 - Approaching problem vs. avoiding
 - Planning strategies
 - Organization
 - Changing approach to studying

- **Exercise**

“When you actually do take the time to exercise, I think that was the semester that I did better on my testing. I just felt like, you know, my head's more in it. A little clear, more clear minded.”

“I just all of a sudden start writing out a list of things I need to do, and kind of try to categorize it,... and then I try to, like, sit down and say, "Gotta get this done.”

- **Individual stress modifiers**
 - DPT students identified themselves as “type A”
 - Students became more relaxed as they transitioned from 1st to 2nd year

“I think managing that so well would be that I tend to be a perfectionist and sometimes that just causes more stress than it's worth and you just have to step back and say it's okay if you're not perfect at XYZ.”

- **Academic program modifiers**
 - Coordination among faculty
 - Reduced emphasis on grades
 - Supportive faculty and cohort

Discussion

- Students reported academics as the primary source of stress
 - High volume of content
 - Frequency of exams
- This could possibly be addressed by having faculty evaluate how much testing is truly necessary.
- Students believed the amount of stress was acceptable.
- As found in the literature, students frequently reported certain levels of stress were motivating.^{4,5,6}
- Despite reporting high debt load, financial sources of stress were not as prevalent among participants compared to previous studies.
 - Focused on finishing school & not repaying student loans
 - Seen as something they could not control
 - Students might not fully understand their financial decisions
- Due to low concern about student debt, perhaps more financial education should be incorporated throughout the curriculum.^{5,7}
- Overall, students in this study used positive coping strategies more often than negative.

Discussion Cont.

- Compared to students in other fields, DPT students utilized exercise more often as a coping mechanism, possibly due to their backgrounds involving sports and active lifestyles.^{3,8}
- These students felt supported by their peers and faculty and overall felt like others wanted to help them succeed, creating a culture that encouraged healthy coping mechanisms.

Limitations

- DPT students were recruited only from schools in the Upper Midwest, limiting its external validity.
- Given that students were recruited on a volunteer basis, those who were willing to volunteer may have already been utilizing healthy coping mechanisms allowing them the time to participate in our study.
- Students may have under-reported use of negative coping strategies since the researchers could have been viewed as superiors rather than peers.

Future Research

- Longitudinal study of how the experience of stress changes over time for DPT students.
- Explore how new PTs manage stress and perceive their preparation for making the transition to the workforce.
- Investigate the impact of changes to academic programs for reducing stress, such as a pass/fail grading system or decreasing the volume of tests in one week.

Conclusion

DPT students experience high levels of stress from rigorous academic requirements. This may warrant the exploration of ways to modify the curriculum to reduce the volume of content covered and frequency of exams. However, some level of stress was perceived as acceptable and motivating. DPT students are well equipped to manage their stress and utilize a variety of positive coping mechanisms rather than turning to negative forms of stress management.

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