

University of South Dakota

USD RED

Physical Therapy Student Research Projects

Physical Therapy Research

2023

Impact of Perfectionism, Social Media, and Sleep Hygiene, on Stress in Students from Health Professions Programs

Dayton Duane Braley SPT

University of South Dakota, dayton.braley@coyotes.usd.edu

Madisyn Ann Dingmann SPT

University of South Dakota, madisyn.dingmann@coyotes.usd.edu

Brooke Elizabeth Grussing SPT

University of South Dakota, brooke.grussing@coyotes.usd.edu

Justin Daniel Heinrichs SPT

University of South Dakota, justin.heinrichs@coyotes.usd.edu

Trystin Renae Nilson SPT

University of South Dakota, trystin.nilson@coyotes.usd.edu

Follow this and additional works at: <https://red.library.usd.edu/pt-studentprojects>



Part of the [Physical Therapy Commons](#)

Recommended Citation

Braley, Dayton Duane SPT; Dingmann, Madisyn Ann SPT; Grussing, Brooke Elizabeth SPT; Heinrichs, Justin Daniel SPT; and Nilson, Trystin Renae SPT, "Impact of Perfectionism, Social Media, and Sleep Hygiene, on Stress in Students from Health Professions Programs" (2023). *Physical Therapy Student Research Projects*. 22.

<https://red.library.usd.edu/pt-studentprojects/22>

This Poster is brought to you for free and open access by the Physical Therapy Research at USD RED. It has been accepted for inclusion in Physical Therapy Student Research Projects by an authorized administrator of USD RED. For more information, please contact dloftus@usd.edu.

Impact of Perfectionism, Social Media, and Sleep Hygiene, on Stress in Students from Health Professions Programs



Authors: Dayton Braley, SPT; Brooke Grussing, SPT; Justin Heinrichs, SPT; Trystin Nilson, SPT; Madisyn Stegenga, SPT
Research Advisor: Joy Karges-Brown, PT, EdD, MS

Introduction

- Stress has consistently shown to play an impactful role on the academic performance of health programs.¹⁻³
- Critical to identify stress levels in which negative behaviors compile and begin to impact academic success.¹
- Stress:** A normal reaction to everyday pressures, but can become unhealthy when it disrupts your day-to-day functioning.⁴
- Perfectionism:** One's desire to set and meet high expectations and goals throughout an individual's life and avoid failure.⁵
- Social Media:** Includes websites and applications that allow users to create and share content or to participate in social networking.⁶

Purpose

- Explore the impact of perfectionism, sleep, and social media on stress in health professions program students
- Examine the relationship of increased social media usage on perceived stress.

Methods

Type: Non-experimental survey conducted with Qualtrics.

Subject Selection:

- Non-random sample of convenience from a local university.
- Included if enrolled in physical therapy, occupational therapy, physician assistant, or undergraduate health science program.

Instruments:

- Perfectionism:** Frost Multidimensional Perfectionism Scale (FMPS)⁷
- Sleep:** Pittsburgh Sleep Quality Index (PSQI)^{8,9}
- Stress:** Perceived Stress Scale (PSS)¹⁰
- Social Media:** Questions written based off daily screen time, daily social media usage, daily impact, and social media usage.^{11,12}

Procedures:

- Approved by IRB prior to contacting students.
- Invitations sent out via email with a link to the online survey.
- Reminder emails were sent out one week and 2 weeks after the initial e-mail.

Subjects:

- 62 participants
- Average age of 24 years old.
- 80.6% of participants were female.

Results

Demographic Information:

- 37.1% were PT students, 14.5% were OT students, 21% were PA students, and 27.4 were undergraduate students.
- 16.1% were in the 3.00-3.49 GPA category, 58.1% were in the 3.50-3.99 GPA category, and 25.8% were in the 4.0 GPA category.

Overall Results:

- Perfectionism:**
 - Students generally reported perfectionism scores that were considered above average.
- Sleep:** (Figure 1)
 - 63% fell into the poor sleep category.
- Stress:** (Figure 1)
 - 69.4% were in the moderate stress category.
 - 25.8% were in the high stress category.
- Social Media:**
 - 60% reported 2 to 4 hours of daily screen time.
 - 45% reported time on social media between 1-2 hours.

Analysis of Differences:

- Statistically significant difference between programs based on the amount of time on social media each day ($P=.004$). (Figure 2)
- Statistically significant difference in Perceived Stress ($P=.013$) based on the extent that participants felt that social media affected their stress. Differences in "strongly disagreed" were significantly different than "somewhat/strongly agreed."

Regression Analysis:

- Approximately 52.2% of the variability in the Perceived Stress Score was related to Global Sleep, Total Perfectionism, Daily Screen Time (excluding studying) and Daily Social Media Time ($P=.008$).

Figure 1.

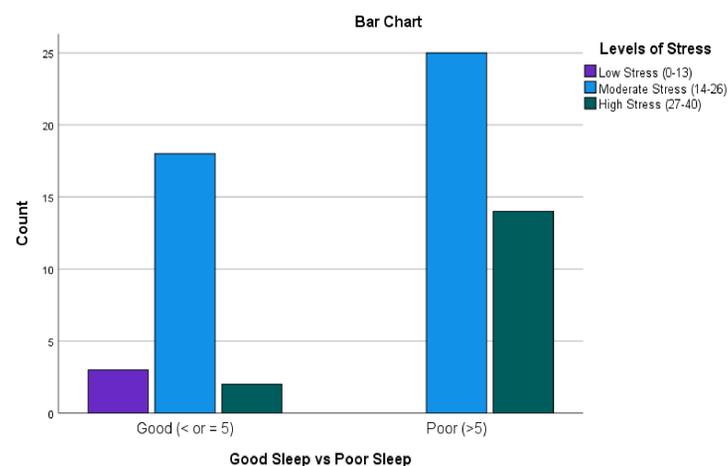
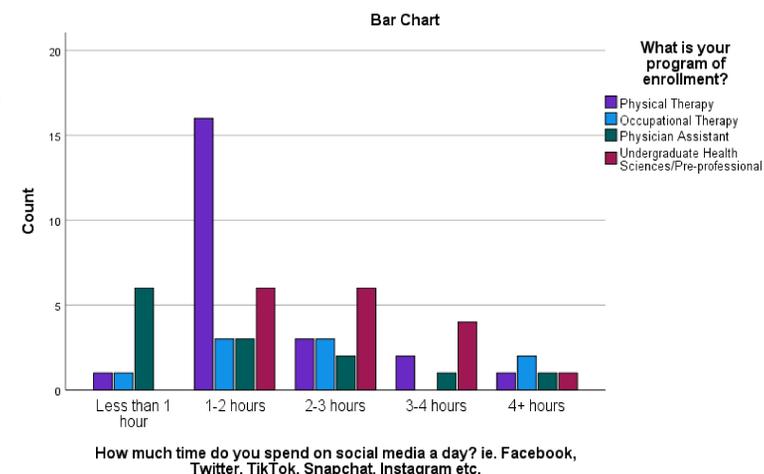


Figure 2.



Discussion

- No significant differences were reported between global sleep, stress, total perfectionism, and daily screen time/social media based on gender and academic program.
- Limited information and results on impact of perfectionism, social media, and sleep on stress in health professional students.
- More research needs to be completed in order to validate these results.

Conclusion

- More students reported moderate stress, poor sleep quality, and higher than average perfectionism scores.
- There are other factors related to stress than what was included in this study.
- Faculty need to be aware of the impact that sleep, perfectionism, and social media have on student stress and should provide strategies to assist with stress management.

Limitations

- One university
- Only students in health professional programs.
- Students may not be honest in their responses.
- Student responses could vary depending on the schedule they had when they completed the survey.
- Somewhat difficult to predict the amount of time spent on social media, which could lead to numbers that are over inflated or under inflated.

Clinical Relevance

- Managing stress is important for students in the health professions programs.
 - Students should be encouraged on the importance of proper sleep hygiene to decrease stress.
 - Students should be aware that increased perfectionism can increase stress and should work to develop coping strategies to address concerns.
 - Students should be reminded of the distractions of social media and how that may impact stress and time management.

References

- Ellis C, Briley PM. Experience doesn't reduce all stress: An exploration of perceived stress among graduate students in Speech-Language Pathology. *J Allied Health*. 2018;47(4):277-281.
- Rizzolo D, Massey S. Fluctuations in stress over time during the first year of health science programs. *J Allied Health*. 2020;49(2):120-124.
- Pfeifer TA, Kranz PL, Scoggin AE. Perceived stress in occupational therapy students. *Occup Ther Int*. 2008;15(4):221-231. doi:10.1002/oti.256.
- Stress Relief is within reach. American Psychological Association website. <https://www.apa.org/topics/stress>. Published: October 2019. Accessed: December 12, 2021.
- Hewitt GL, Flett PL. Perfectionism in the self and social contexts: conceptualization, assessment, and association with psychopathology. *J Pers Soc Psychol*. 1991;60(3):456-470. doi:10.1037//0022-3514.60.3.456.
- Brailovskaia J, Margraf J. What does media use reveal about personality and mental health? An exploratory investigation among German students. *PLoS One*. 2018 Jan 25;13(1). doi: 10.1371/journal.pone.0191810.
- Stöber J. The Frost Multidimensional Perfectionism Scale revisited: More perfect with four (instead of six) dimensions. *Pers Individ Dif*. 1998;24(4):481-491.
- Buyssse DJ, Reynolds CF, Monk TH, Berman SR, Kupfer DJ. The Pittsburgh Sleep Quality Index: a new instrument for psychiatric practice and research. *Psychiatry Res*. 1989;28(2):193-213. doi.org/10.1016/0165-1781(89)90047-4.
- Backhaus J, Junghanns K, Broocks A, Riemann D, Hohagen F. Test-retest reliability and validity of the Pittsburgh Sleep Quality Index in primary insomnia. *J Psychosom Res*. 2002;53(3):737-740. doi.org/10.1016/S0022-3999(02)00330-6.
- Roberti JW, Harrington LN, Storch EA. Further Psychometric Support for the 10-Item Version of the Perceived Stress Scale. *J Coll Couns*. 2006;9(2):135-147.
- Jiang Y. (2021). Problematic Social Media Usage and Anxiety Among University Students During the COVID-19 Pandemic: The Mediating Role of Psychological Capital and the Moderating Role of Academic Burnout. *Frontiers in Psychology*. doi.org/10.3389/fpsyg.2021.612007.
- Bickerdike A, O'Deasmhunaigh C, O'Flynn S, O'Tuathaigh C. Learning strategies, study habits and social networking activity of undergraduate medical students. *International Journal Medical Education*. 2016;7:230-236. doi:10.5116/ijme.576f.d074.