# Examining the Relationship between Stress and Exercise among College Freshmen: A Correlational Study

# **Abstract:**

- **Objective**: The purpose of this study was to compare the relationship between physical activity and stress levels.
- Methods: Scientific research was performed by conducting a survey, which was sent out to the freshman class of 2026 at Misericordia University. The students answered a series of questions related to physical activity in high school, college, their stress levels in high school and college, and their preferred type of physical activity.
- **Results:** The results of the survey show an indirect relationship between physical activity and stress levels.
- Conclusion: Students overall were more active during high school and experienced lower levels of stress, whereas in college, the students were less active and had higher levels of stress.

# **Introduction:**

 This scientific poster aims to investigate the relationship between physical activity and stress levels among freshman students at Misericordia University. To explore this relationship further, a survey was conducted to gather data on the physical activity and stress levels of students both before and during their freshman year of college. A total of 50 responses were collected and analyzed to understand the results. These results were then compared to other peer reviewed articles to evaluate the date collected.

#### **References:**

Leuchter, R. K., Stuber, M. L., McDonald, A. L., & Croymans, D. M. (2022). Relationship between exercise intensity and stress levels among U.S. medical students. *Medical Education Online*, *27*(1), 1–8.

https://doi-org.misericordia.idm.oclc.org/10.1080/10872981.2022.2027651 Li, Y., Deng, J., Lou, X., Wang, H., & Wang, Y. (2020). A daily diary study of the relationships among daily self-compassion, perceived stress and health-promoting behaviours. International Journal of Psychology, 55(3), 364–372. https://doi.org/10.1002/ijop.12610



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### Methods:

To obtain the research about the correlation between physical activity and stress levels, a survey was sent out to the freshman class of 2026 at Misericordia University. The survey was sent out via email and had a series of questions that asked about the students physical activity and stress levels

The survey was open for 4 weeks and a total of 50 students responded to the survey. Their responses were analyzed and the top responses in each category were recorded .Some questions asked included:

- How often did you engage in physical activity before college?
- On a scale of 1-10 please rate your
  stress level before college
- How often do you engage in physical activity while in college?
- On a scale of 1-10 please rate you stress level while in college.
- Do you feel less stressed/relieved
  after engaging in physical activity?

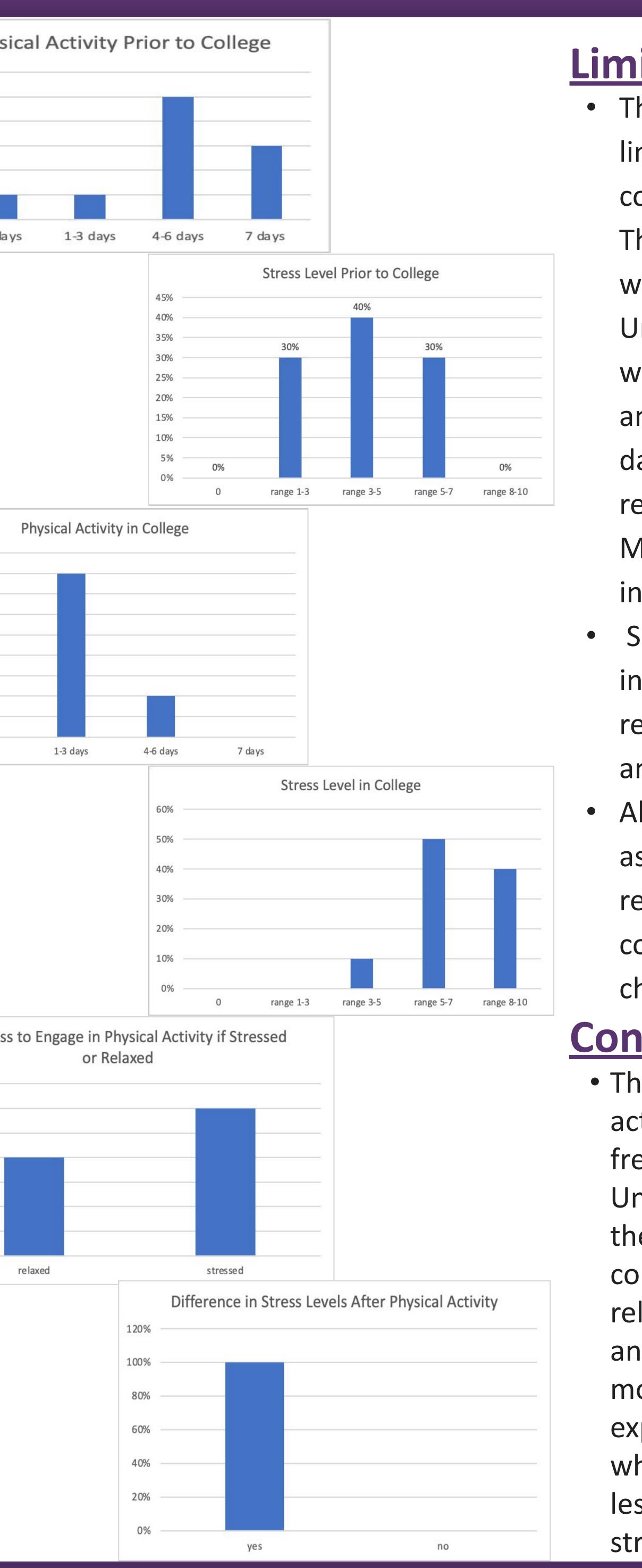
#### **Results:**

 The results of the survey showed an indirect relationship between physical activity and an individual's stress levels. Students were more active prior to college, showing their stress levels to be lower. Overall, students are not as active while in college, and their stress levels are increased.

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# Limitations:

 This study has several potential limitations. A survey was used to collect the data used in this research. The survey was sent via email to the whole freshman class at Misericordia University, and only 50 responses were received. With a large class size and only 50 student responses, the data received may not properly represent the whole freshman class at Misericordia University or other institutions.

Survey questions could be answered incorrectly or untruthfully by the respondents, causing response errors and leading to incorrect data. Although there is not a correct way to ask or word a question or the response options, there may be confusion on which response to choose.

# Conclusion:

 The relationship between physical activity and stress levels among freshman students at Misericordia University was investigated through the use of a survey. The results concluded that there is an indirect relationship between physical activity and stress levels. Students overall were more active during high school and experienced lower levels of stress, whereas in college, the students were less active and had higher levels of stress.