

ORAL PRESENTATION

Open Access

Grit and Grace: The Influence on Resiliency on Wellness and Academic Achievement

Kendall Taomoto and Malosi Siania

Presented to Research Methods, Dr. H. Island, Pacific University, Forest Grove, OR. May 2, 2023

Introduction

University life is a process of adaption to changes between school and social life, and undergraduate students in particular are in a critical transitional period. Mental health problems are significantly prevalent among university students, with anxiety and depression being the most common (Kumaraswamy, 2013). They stem from psychological and emotional problems when confronted with stressful and traumatic circumstances (Kumaraswamy, 2013). Some problems encountered by students include: academic pressures, managing transitions, suicidal thoughts, relationship difficulties and lack of self-confidence or low self-esteem (Kumaraswamy, 2013).

The global Covid-19 pandemic has brought about many adverse effects and consequences. Since Covid-19 is novel, research on the subject is recent. Mannarini et al.'s (2020) longitudinal study also revealed a possible causal relationship between Covid-19 lockdown conditions and internalized problems. Due to its longitudinal design, this study highlighted that Covid-19 predicted declines in mental health.

A strategy that has been found to help students combat psychological and mental health problems is psychological resilience and coping strategies (Yu et al., 2020). Resilience provides us with the ability to bounce back from stress, to thrive in the face of adversity, and to go about our daily routine despite stressful circumstances (Carver, 1998; Tusaie & Dyer, 2004). Through our research, it is apparent that building resilience is an effective and highly recommended coping strategy for students struggling with adapting to university life and demands.

The purpose of our study is to examine how mental health, grit and resilience levels affects college students' academic performance and ability to persevere through adversity. We are expecting to find that there will be a negative correlation between anxiety and depression in relation to college student's performance and ability to cope with adversity. We also predict college students who have higher levels of resilience will have a more proficient academic achievement. Additional evaluation will be made on the influence of being a collegiate athlete in correspondence with resiliency and grit levels in relation to their academic performance.

Empirical Question

Is there a significant relationship between convergence insufficiency, attentional problems (also self-reported ADHD diagnoses), and dyslexia symptoms (also self-reported dyslexia)?

Participants

A priori power analysis of a one-tailed correlation using G*Power® software yielded a projected sample size of 100 participants (40 females, 40 males & 20 non-binary). Convenience sampling will occur on the Pacific University campus from among both the undergraduate and graduate populations through email. We anticipate the average age of the sample will be 25 years.

Proposed Method

We will obtain the data using the survey program Qualtrics to conduct online surveys. The material for this study includes the cited measures:

14-item Resilience Scale (RS-14)

The 14-item Resilience Scale (RS-14) consists of 14 questions measuring a single construct of psychological resilience. Each item is rated using a 7-point Likert scale (Wagnild, 2009). **Short Grit Scale**

The Short Grit Scale consists of eight statements measuring trait level perseverance and passion for long term goals. Each item is rated using a 5-point Likert scale (Duckworth, Peterson, Matthews, & Kelly, 2007).

The Penn State Worry Questionnaire

The Penn State Worry Questionnaire consists of 16 statements measuring the trait of worry in adults. Items are rated on a 5-point Likert scale (Meyer, Miller, Metzger, & Borkovec 1990).

Beck's Depression Inventory Scale

Beck's Depression Inventory Scale is a 21-item, self-report rating inventory that measures characteristic attitudes and symptoms of depression. Each item is rated on a 4-point Likert scale ranging from 0 to 3 (Beck, et al., 1961).

Academic Scale

The Academic Scale will evaluate the participant's academic performance. This section consists of 13 questions and statements that are rated based on a 3-point Likert scale used to measure agreement. Options will include: yes, no, and sometimes. The design for this descriptive study is survey research that will examine how levels of resiliency and grit affects college student's academic performance and ability to persevere through adversity. These variable levels will be measured through the five self-report scales. We will assess the effect of resilience and grit levels on the participant's academic achievement and self-efficacy through the scales provided. Additionally, we will categorize the data based on college students and college student athletes to evaluate the difference in resiliency and grit levels in relation to their academic performance.

Participants will receive the survey via a link, including a short description of the survey. After completing the informed consent section, participants will be aware that this survey is to evaluate their resilience and grit levels in correlation to their personal academic performance and ability to cope with adversity. A brief description explaining the required response will be provided for each section on the survey. This will be through Likert-like categories (e.g., Strongly Agree, Agree, Disagree, Strongly Disagree). We expect the survey to be taken over a 20 minute to one hour period. As stated in the informed consent, participants do not have to answer every question. Once the surveys have been completed, any collected surveys with incomplete data will be discarded. Appropriate statistical analyses will be completed using SPSS®.

Anticipated Results

The results will be interpreted using Pearson's r. Internal consistency will be assessed on the demographics survey, and a MANOVA will be assessed on the correlations.

Conclusion

We anticipate the results will demonstrate that correlations of high resilience and grit scores will positively affect student's wellbeing and academic performance as well as a negative correlation between anxiety and depression in relation to college student's performance and ability to cope with adversity.



References

- Tusaie, K., & Dyer, J. (2004). Resilience: A historical review of the construct. Holistic Nursing Practice, 18, 3–8.
- Xin, T. (2000). College students' adaptation from the whole concept of life development theory. *Beijing Normal University academic journal*, 2(158), 81-87.
- Li H, Moreland JJ, Peek-Asa C, Yang J. Preseason Anxiety and Depressive Symptoms and Prospective Injury Risk in Collegiate Athletes. The American Journal of Sports Medicine. 2017;45(9):2148-2155. https://doi.org/10.1177/0363546517702847
- Kumaraswamy, N. (2013). Academic stress, anxiety and depression among college students: A brief review. *International review of social sciences and humanities*, 5(1), 135-143.
- Mannarini, S., Parola, A., Rossi, A., Tessitore, F., & Troisi, G. (2020). *Mental health through the COVID-19 quarantine: A growth curve analysis on Italian young adults*. Frontiers In Psychology. https://doi.org/10.3389/fpsyg.2020.567484
- Sun, S., Goldberg, S. B., Lin, D., Qiao, S., & Operario, D. (2021). Psychiatric symptoms, risk, and protective factors among university students in quarantine during the COVID-19 pandemic in China. *Globalization and Health*, *17*(1), http://dx.doi.org/10.1186/s12992-021-00663-x
- Soylu, Y. (2021). The psychophysiological effects of the COVID-19 quarantine in the college students. *Physical Education of Students*, 25(3), 158-163.
- Wu, Yu, et al. "Psychological Resilience and Positive Coping Styles among Chinese Undergraduate Students: A Cross-Sectional Study." BMC Psychology, BioMed Central, 6 Aug. 2020, www.ncbi.nlm.nih.gov/pmc/articles/PMC7406959/.
- Kannangara, C. S., Allen, R. E., Waugh, G., Nahar, N., Khan, S., Rogerson, S., & Carson, J. (2018). All That Glitters Is Not Grit: Three Studies of Grit in University Students. Frontiers in psychology, 9, 1539. https://doi.org/10.3389/fpsyg.2018.01539
- Liu, CH., Stevens, C., Wong, S. H., Yasui, M., & Chen, J. A. (2019). The prevalence and predictors of mental health diagnoses and suicide among US college students: Implications for addressing disparities in service use. *Depression and anxiety*, 36(1), 8-17.
- Poursardar, F., Abbaspour, Z., Abdi Zarrin, S., & Sangari, A. A. (2012). The effect of resilience on mental health and life satisfaction, a psychological pattern of well-being. *Quarterly Journal of New Thoughts in Educational Sciences*, 14(1), 81-9
- Beck, A.T., Ward, C. H., Mendelson, M., Mock, J., & Erbaugh, J. (1961) An inventory for measuring depression. *Archives of General Psychiatry*, 4, 561-571.
- Wagnild, G. (2009). A review of the Resilience Scale. *Journal of nursing measurement*, 17(2), 105-113.
- Duckworth, A.L, & Quinn, P.D. (2009). Development and validation of the Short Grit Scale (GritS). Journal of Personality Assessment, 91, 166-174.
- Meyer TJ, Miller ML, Metzger RL, Borkovec TD (1990). Development and validation of the Penn State Worry Questionnaire. Beh Research and Therapy, 28, 487-495.
- Epstein, Ronald M. MD; Krasner, Michael S. MD. (2013) Physician Resilience: What It Means, Why It Matters, and How to Promote It. Academic Medicine 88(3):p 301-303.
- Grøtan, K., Sund, E. R., & Bjerkeset, O. (2019, January 8). *Mental health, academic self-efficacy and study progress among college students*. Frontiers. Retrieved April 28, 2023, from https://doi.org/10.3389/fpsyg.2019.00045