

2017

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Recommended Citation

Wegmann, Jennifer; Moshman, Rachel A.; and Rubin, Lily, "Is it Possible to Change the Way College Students Think About Stress? The Benefits of a Stress Management Course" (2017). *Research Days Student Posters*. 8.

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Is it Possible to Change the Way College Students Think About Stress? The Benefits of a Stress Management Course.

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Abstract

The purpose of this study was to analyze the effects of a stress management course on college students' stress mindsets. Stress mindset encompasses the beliefs one holds about stress. Those who view stress as beneficial have a stress-is-enhancing mindset, while those who view stress as detrimental have a stress-is-debilitating mindset. Subjects enrolled in a physical activity course (control group, n=25) and a stress management course (n=24) possessed a neutral stress mindset at baseline. Students in the intervention group showed a significant shift to a more stress-is-enhancing mindset by the end of the semester. Students in the control group did not show any significant changes in stress mindset over the course of the semester. Additionally, we analyzed the relationships between personality traits and baseline stress mindset and found significant correlations. However, no relationships existed when personality and changes in stress mindset were analyzed.

Introduction

For decades, research has suggested college students are under tremendous stress, leading to negative behavior and health outcomes including more depressive symptoms, lack of sleep, lower GPA and less physical activity, binge drinking and use of substances, including marijuana. Recent research suggested the positive or negative effects of stress are mainly dependent upon the mindset one holds about stress. Beliefs surrounding the attributes and expectations of stress, which can result in either enhancing or debilitating outcomes, is defined as stress mindset. Individuals holding a stress-is-debilitating mindset believe stress negatively impacts performance, productivity, health, well-being, learning and growing. Conversely, those who hold a stress-is-enhancing mindset believe the aforementioned outcomes are enhanced by stress. Research examining stress mindset has shown simple interventions can elicit a stress-is-enhancing mindset, and this change is accompanied by positive changes in psychological health and work performance, higher satisfaction with health, and increased energy. Interestingly, research examining stress and personality has suggested that specific personality types may enhance or inhibit one's stress experience and coping. However, no research to date has examined the relationship between personality and stress mindset.

Methods

This study employed a quasi-experimental research design to assess the effectiveness of a semester-long stress management course in eliciting a change in stress mindset among a college population. Participants for the study were recruited in the fall semester of 2016 from two undergraduate courses in the Health and Wellness Studies department at Binghamton University (N= 49). Students in the experimental group were enrolled in a stress management course (n= 24), and students in the control group were enrolled in an activity course (n= 25). The mean age was 21, and 68% were women. The experimental group was exposed to a stress-is-enhancing teaching philosophy and engaged in several projects that promoted a stress-is-enhancing mindset. The control group spent half of their class time in activity and the other half in lectures that focused on various health and wellness topics. One class section (30 minutes) included discussion on stress. This discussion focused on the disadvantages of stress and how to reduce or eliminate stress. Students in both conditions completed the Stress Mindset Measure survey online in the second and twelfth weeks of the semester. Students in both groups also completed the NEO-5 personality survey online in the seventh week of classes.

Results

- There was a significant negative correlation between neuroticism scores and baseline stress mindset, $r = -.439, p = .002$.
- There were also significant positive correlations between openness and baseline stress mindset, $r = -.355, p = .012$ and extraversion and baseline stress mindset, $r = -.312, p = .029$.
- Students who underwent the intervention displayed a significant shift from a neutral mindset at the beginning of the semester ($M = 2.1302, SD = .64$) toward a stress-is-enhancing mindset at the end of the semester ($M = 2.7812, SD = .59$); $t(23) = 6.311, p < .001$.
- Students in the control group did not show any significant changes in stress mindset from the beginning of the course ($M = 1.945, SD = .82$) to the end of the course ($M = 2.06, SD = .98$); $t(24) = .75, p < .461$
- Individuals with higher neuroticism scores benefitted more from intervention than did individuals with lower neuroticism scores, $r = .475, p = .019$.

Table 1. Means, Standard Deviations, and Correlations between Stress Mindset and Personality

Name	Stress Mindset Measure	Neuroticism	Extraversion	Openness	Agreeableness	Conscientiousness	Gender
Stress Mindset Measure	Mean: 2.04 Std Dev: 0.729						
Neuroticism	Mean: 23.02 Std Dev: 9.509	-0.441** 1					
Extraversion	Mean: 27.62 Std Dev: 4.759	0.310*	-0.489** 1				
Openness	Mean: 29.10 Std Dev: 6.519	0.355*	0.038	0.183 1			
Agreeableness	Mean: 32.72 Std Dev: 6.201	0.201	-0.610**	0.582**	0.196 1		
Conscientiousness	Mean: 33.10 Std Dev: 7.898	0.020	-0.460**	0.356*	-0.035	0.477** 1	
Gender		0.066	-0.161	-0.099	-0.044	0.024	-0.206 1

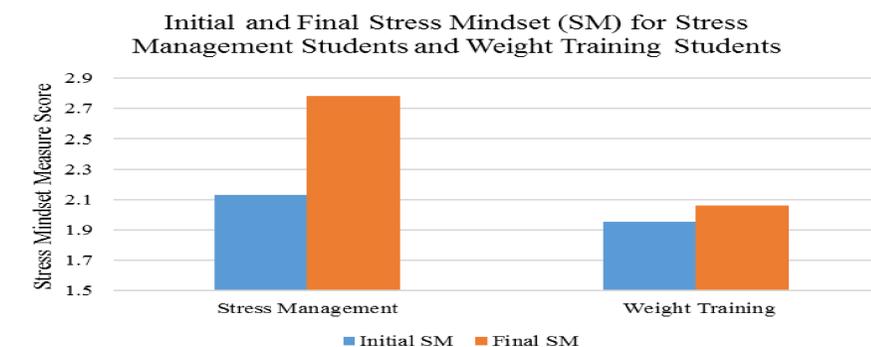
N=49
* Correlation is significant at the 0.05 level (2-tailed)
** Correlation is significant at the 0.01 level (2-tailed)

Table 2. Means, Standard Deviations, and Correlations between Changes in Stress Mindset and Personality

Name	Change in Stress Mindset	Neuroticism	Extraversion	Openness	Agreeableness	Conscientiousness	Gender
Change in Stress Mindset	Mean: .378 Std Dev: 0.700						
Neuroticism	Mean: 23.02 Std Dev: 9.509	-0.045 1					
Extraversion	Mean: 27.62 Std Dev: 4.759	-0.064	-0.489** 1				
Openness	Mean: 29.10 Std Dev: 6.519	0.005	0.038	0.183 1			
Agreeableness	Mean: 32.72 Std Dev: 6.201	0.111	-0.610**	0.582**	0.196 1		
Conscientiousness	Mean: 33.10 Std Dev: 7.898	0.192	-0.460**	0.356*	-0.035	0.477** 1	
Gender		-0.274	-0.161	-0.099	-0.044	0.024	-0.206 1

N=49
* Correlation is significant at the 0.05 level (2-tailed)
** Correlation is significant at the 0.01 level (2-tailed)

Figure 1. Initial and final stress mindset. Students who took part in the stress management course were significantly more likely to view stress in a more positive way by the end of the semester, compared to their control counterparts.



Discussion

As we hypothesized, students in the experimental condition developed a more stress-is-enhancing mindset compared to the control group. While this is a novel finding among the college population, it supports Crum and colleagues' finding that simple interventions work to change the stress mindset of adults in a business setting.

The current findings are important because changing students' mindsets regarding the benefits of stress can have positive implications for how they view and deal with stress. Individuals with an enhancing mindset are more likely to accept stress and participate in actions that meet the demand of stress. These individuals utilize stress in a way that helps achieve positive outcomes, both physically and mentally. Developing a stress-is-enhancing mindset has the potential to help students function optimally in both school and life. For example, during a stressful time, students with a positive view of stress were less likely to report negative physical symptoms such as headaches.

Although we found correlations between stress mindset and personality at baseline, there were no correlations with changes in stress mindset. Regardless of personality traits, individuals had the ability to develop a more stress-is-enhancing mindset. This finding is novel, as it has been well established that certain personality factors are associated with the stress experience and coping. This research suggests that personality does not prevent individuals from changing their stress mindsets.

References

- (1) Brown, R. T. (1992). Helping students confront and deal with stress and procrastination. *Journal of College Student Psychotherapy*, 6(2), 87-102.
- (2) Leppink, E. W., Odlaug, B. L., Lust, K., Christenson, G., & Grant, J. E. (2016). The young and the stressed: Stress, impulse control, and health in college students. *The Journal of Nervous and Mental Disease*, doi:10.1097/NMD.0000000000000586
- (3) Aldridge-Gerry, A. A., Roesch, S. C., Villodas, F., McCabe, C., Leung, Q. K., & Da Costa, M. (2011). Daily stress and alcohol consumption: Modeling between-person and within-person ethnic variation in coping behavior. *Journal of Studies on Alcohol and Drugs*, 72(1), 125-134.
- (4) Gress-Smith, J. L., Roubinov, D. S., Andreotti, C., Compas, B. E., & Luecken, L. J. (2015). Prevalence, severity and risk factors for depressive symptoms and insomnia in college undergraduates. *Stress and Health*, 31(1), 63-70.
- (5) Crum, A., Lyddy, C., Ngnoumen, C., Ie, A., & Langer, E. (2014). De-stressing stress: The power of mindsets and the art of stressing mindfully. *The Wiley Blackwell Handbook of Mindfulness*, 948-963.
- (6) Crum, A. (2011). Evaluating a mindset training program to unleash the enhancing nature of stress. Paper presented at the *Academy of Management Proceedings*, 2011(1), 1-6.
- (7) Crum, A. J., Salovey, P., & Achor, S. (2013). Rethinking stress: The role of mindsets in determining the stress response. *Journal of Personality and Social Psychology*, 104(4), 716.
- (8) Vollrath, M., & Torgersen, S. (2000). Personality types and coping. *Personality and Individual Differences*, 29(2), 367-378. doi://dx.doi.org.proxy.binghamton.edu/10.1016/S0191-8869(99)00199-3
- (9) Fischer, S., Nater, U. M., & Laferton, J. A. (2016). Negative stress beliefs predict somatic symptoms in students under academic stress. *International Journal of Behavioral Medicine*, 1-6.
- (10) Vollrath, M., & Torgersen, S. (2000). Personality types and coping. *Personality and Individual Differences*, 29(2), 367-378. doi://dx.doi.org.proxy.binghamton.edu/10.1016/S0191-8869(99)00199-3