

Evaluation of the Brief Academic Trauma Intervention for MU Students

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Introduction

Post-traumatic stress disorder (PTSD) is defined by the National Institute of Mental Health (NIMH) as a mental health problem that can occur after a traumatic event that involves physical harm or the threat of physical harm, such as war, assault, or a natural disaster (NIMH, 2016). There are four common symptoms associated with PTSD: intrusion, avoidance, negative cognitions and mood, and arousal and reactivity. These symptoms lead to problems in various aspects of life but, for college students, can lead to particular difficulty in succeeding with college coursework. Avoidance can cause students to neglect assignments or fail to study for exams. Hyper-arousal can make students feel anxious and restless in the classroom, and negative cognitions and mood can lead students to abuse drugs or alcohol, or lose motivation for attending classes. The present study presents research on a promising program developed for students at Methodist University to reduce the negative impact of trauma on academic performance.

There is a high incidence of PTSD and people affected by it. Around 70% of U.S. citizens will be exposed to trauma sometime during their lifetimes (Kessler et al., 2005). Only 6.8% of individuals suffering from PTSD will be diagnosed, but a high percentage of individuals report some impairment in functioning due to their trauma. Around 20% to 50% of U.S. children are victims of violence that will have lasting effects (Finkelhor & Dzuiba-Leatherman, 1994).

Addressing factors associated with PTSD among students is important for their retention and success in college. The consequences of trauma have extended to academics such that students have shown decreased intellectual functioning and reading ability (Delaney-Black et al., 2002) as well as a lower GPA, and are absent more times than fellow students who have not experienced a trauma (Hurt, Malmud, Brodsky, & Giannetta, 2001).

A survey conducted at Methodist University in 2013 found that 70% of students reported having experienced a traumatic event (Kline, 2013). With so many students being affected by some form of trauma, its role in retention should be a

primary concern for schools. Slight impairments due to trauma, if addressed, could possibly increase the success among these students suffering from trauma.

This brief academic trauma intervention (BATI) study took an existing program, Support for Students Exposed to Trauma (SSET) (Jaycox et al., 2009), which was developed for use with middle and high school students following school shootings. SSET was designed to be implemented by trained but non-clinical personnel. The present study adapted this program for the college level and for administration by students trained in the program. Through this BATI study, the researcher hoped to show that certain interventions are beneficial and decrease any academic difficulties students might have due to trauma.

Methods

Subjects

The participants in this study were (N=28) Methodist University students ranging in age from 20 to 45 and comprised veterans and non-veterans who were screened for PTSD symptoms but did not meet the diagnostic threshold. Participants were selected if they showed some academic impairment, experienced a traumatic event, and showed some evidence of PTSD symptomatology. Participants reporting a higher frequency of symptoms were considered to be experiencing some PTSD symptomatology. They were then randomly assigned to either a treatment condition or a control condition.

Measures

The measure used in this study was the Weiss Functional Impairment Rating Scale Self-Report (WFIRS Self-Report) (Weiss, 2000), a list of 70 questions in seven categories by which participants rate how their emotional or behavioral problems have affected each area. The Weiss Functional Impairment Rating school section was completed by a professor whom the subject chose; this section looked at only the school category in the WFIRS Self-Report, a section that listed any problems participants might have at school and was completed pre- and post-study, and reported the subjects' GPAs at midterm and again at final grades.

Procedures

Subjects were assigned to a group based on their schedule availability. Each BATI group included two trained group leaders and the experimental subjects, and met for a total of five sessions. During those sessions subjects were taught cognitive-behavioral methods for coping with their trauma as well as stress reduction techniques. The following is a breakdown of the BATI sessions:

- **Session 1** focused on going over Beck's cognitive triad, which looks at the connection between thoughts, feelings, and behaviors, and aims to normalize common reactions to trauma. Participants were taught progressive muscle relaxation techniques to be used when they were feeling anxious.
- **Session 2** was mainly directed at identifying and arguing against automatic negative thoughts associated with the trauma.
- **Session 3** called for the group to go over recognition of avoidance behaviors and plans to "face your fears."

- **Session 4** focused on processing the trauma. Participants completed writing exercises to develop different perspectives and to distance themselves from the trauma.
- **Session 5** encouraged participants to look at the connection between thoughts and actions, and reviewed practical problem solving.

Analysis

Data from this study were statistically analyzed utilizing a two (midterm, finals) by two (BATI experimental group, control group) mixed factorial analysis of variance (ANOVA), with repeated measures on time of measurement to control for experimentwise error due to multiple comparisons.

Results

Figure 1 presents the ANOVA results for GPA change for the BATI treatment *versus* control groups. There is a significant difference between the treatment (experimental) group and the control group, with the treatment group having higher initial GPA than the control ($F(1,11)=320.51, p=0.01$). There was a significant change in GPA from initial to follow-up condition for both groups ($F(1,11)=7.87, p=0.02$).

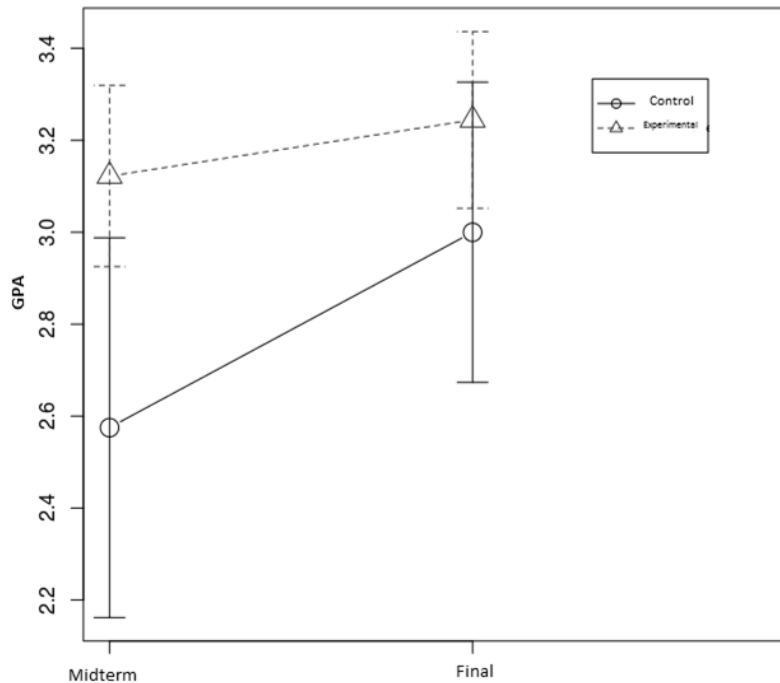


Figure 1. Changes in GPA

The next analysis looked at participant self-report on classroom performance. Self-reported class performance problems significantly decreased from time 1 to time 2 for both groups ($F(1,26)=37.28, p<0.01$).

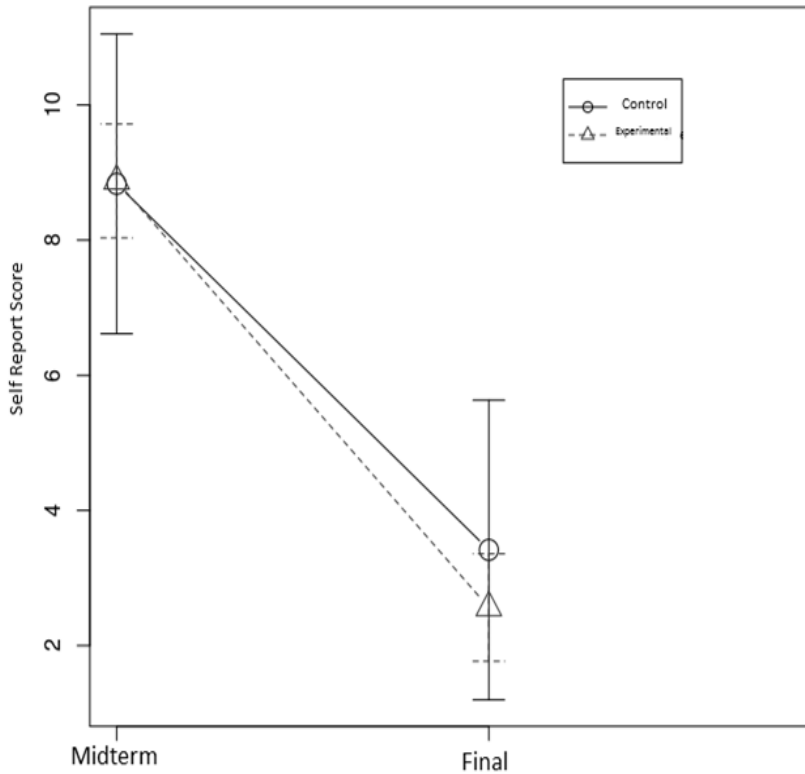


Figure 2. Self-Report of Classroom Performance

Figure 3 on the following page represents the analysis of the teacher ratings of the subjects' classroom performance at midterm and at the end of the semester. The two groups differed in teacher rating at time 1, ($F(1,26)=0.02$). Ratings significantly changed from time 1 to time 2 for both groups ($F(1,26)=0.03$). This is primarily due to the decrease in ratings for the BATI treatment group. Although that decrease would be seen in an interaction effect, the interaction only approached significance ($F(1,26)=0.09$); this is likely due to the large variation associated with the small sample size. A trend toward significance is clear from the graphic display.

Discussion

The analysis showed significant improvement in GPA for both the BATI treatment group and the control group, with no significant difference between the two. In other words, GPA appears to improve from midterm to final grades generally, and the BATI intervention did not appear to add to this. The self-report analysis showed no difference between the BATI and control groups, with both showing a decrease in self-

reported academic performance from midterm to finals. The finding of most interest is the change in teacher ratings for the BATI group compared to the control group: the strong trend toward a significant interaction despite the very small sample size shows promise for future utilization and study of the BATI protocol.

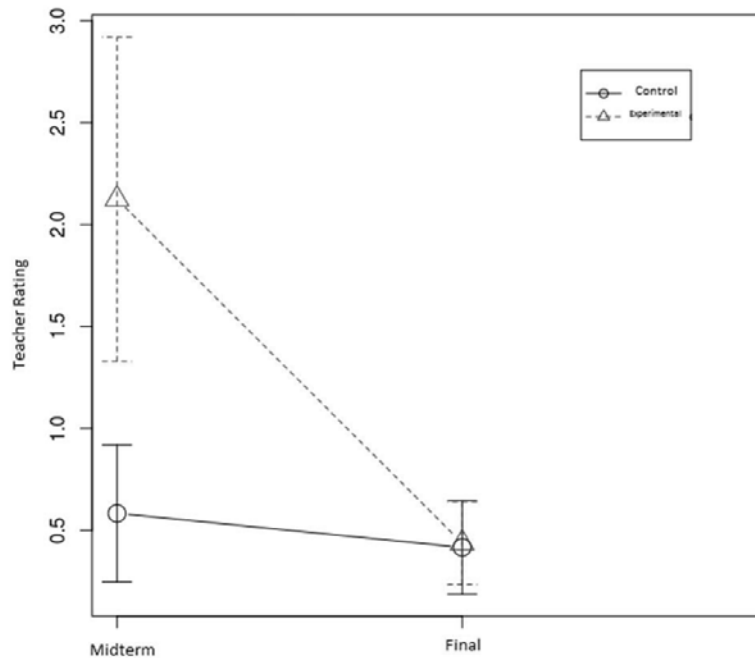


Figure 3. Teacher Ratings of Classroom Performance

Overall, BATI appears to be an effective program for improving the academic performance of college students experiencing trauma-related symptoms. Future research will seek to expand the program utilizing biofeedback and to further assess the program against a placebo control group condition.

Limitations to this study include the small sample size, which led to less statistical power and high attrition rates, and resulted in lost data. The second limitation was the use of self-report for GPAs and the short time frame over which GPA was assessed. These issues will be addressed in future research.

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