



The Effectiveness of an Among University Students Anxiety Intervention on Decreasing State and Trait Anxiety

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Introduction

Higher education institutions are seeking proactive ways to reduce rising rates of anxiety. This study measures an anxiety intervention called *Hammer, Glasses, Pillow's* (HGP) immediate and long-term effectiveness in reducing state and trait anxiety rates among undergraduate students.

Methods

Participants

A sample of 351 first-year students were selected from a southern Christian university. 253/351 participated. Out of the 253, 18 completed the post-post STAI test for the group they were assigned, for a completion rate of 7%. Out of the 18 participants 61% were female and 39% were male, with fairly equal samples in each experimental or control group.

Instruments

The State-Trait Anxiety Inventory (STAI) is a two part 40-item inventory commonly used to assess trait and state anxiety (Spielberger et al., 1983). Form Y-1 consists of 20 items measuring how participants feel *right now* (State Anxiety) and form Y-2 consists of 20 items measuring how participants *generally feel* (Trait Anxiety). Items are rated on a 4-point Likert scale from "Not at All" to "Very Much So". Higher scores indicate higher anxiety levels.

Procedure

This intervention utilized two proctored 15 or 45 minute video presentations focused on anxiety symptom reduction and self-care presented at Fall Orientation to the incoming first-year students.

Procedure - Cont.

The students were randomly assigned into one of three groups:

- Group 1 - HGP and psychoeducation about the neurobiology of anxiety (45 min)
- Group 2 - HGP only (15 min)
- Control Group - no intervention

Both Groups 1 & 2 were administered a digital pre-survey, post-intervention survey, and a 90 day delayed post-post survey. The Control Group completed the survey at the time of the pre-test and post-post testing times of the other groups.

Results

1. A oneway ANOVA found no significant differences between the 3 groups on the pre-test for State Anxiety ($F(2,15) = 3.12, p = 0.07$) or Trait Anxiety ($F(2,15) = 1.23, p = 0.32$).
2. Repeated measures ANOVAs found no significant difference between the three conditions (pretest, post-test and post-post test) on:
 - a) State Anxiety for Group 1 ($F(2, 6) = 37.00, p = 0.51$).
 - b) State Anxiety for Group 2 ($F(2, 8) = 20.07, p = 0.82$).
 - c) Trait Anxiety for Group 1 ($F(2, 6) = 69.25, p = 0.14$).
 - d) Trait Anxiety for Group 2 ($F(2, 8) = 45.07, p = 0.51$).
3. A oneway ANOVA *did find* a significant difference for State Anxiety between the control group and those who had been exposed to the intervention (both Group 1 & 2) on the post-post tests ($F(2,15) = 4.06, p = 0.04$).

Fisher's Least Significant Difference (LSD) post hoc indicated a significant difference between the State Anxiety scores for both Group 1 ($M=37.75, SD=6.40$) and Group 2 ($M=40.80, SD 17.11$), and the Control Group ($M=57.67, SD=13.72$) ($p = 0.03$ & $p = 0.04$, respectively).

Discussion

1. No differences were found on anxiety between the 3 groups initially suggesting that the participants were experiencing similar levels of anxiety.
2. Neither intervention conditions were found to influence their respective groups, which may suggest:
 - a) the psychoeducation on anxiety or ways to manage anxiety used in this study do not lower anxiety, or
 - b) that if these interventions do lower anxiety, the difference was not able to be detected due to the low number of participants.
3. The control group reported higher levels of anxiety than did both intervention groups for state anxiety at the time of the 90 day delay.
- a) This result may suggest the intervention provided coping skills to Group 1 and Group 2 to use during a stressful period (ex. finals week).

In conclusion, it's possible that while the intervention *did not lower* the students' state anxiety, it *did help prevent* their anxiety from rising when they experienced greater external stressors. This suggests the intervention may provide coping skills that help participants maintain their State Anxiety when confronted with stressful situations. This is particularly noteworthy due to such a small n .

Limitations

The biggest limitation for this research was the extremely high attrition rate resulting in a completion rate of 7%. Such a small n left little room for detecting differences. In future studies, this researcher should work to eliminate factors contributing to attrition.