

The Effects of Centering Prayer Compared to Exercise on

Undergraduate Student's Everyday Stress

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Abstract

Meditation and exercise have both been shown to have similar stress-reducing effects. Most of the research on meditation comes from eastern Buddhist and Hindu traditions. Centering Prayer is a spiritual form of meditation rooted in the Christian tradition of contemplative prayer that has received little research. In this study, the participants were split into two groups, one group practiced Centering Prayer for 20 minutes a day over a 6-week period, while the other group performed deliberate exercise for 20 minutes a day over the same 6-week period. The goal of this study was to compare the effectiveness of practicing Centering Prayer to that of performing deliberate exercise on undergraduate students' experience of stress.

"Initially doing Centering Prayer was hard for me, but over time it started to get easier and I felt more relaxed after doing it"

Introduction

Centering Prayer is a Christian contemplative practice which aims to help us experience God's presence within us (Ferguson, 2010; Contemplative Outreach, 2014). This study measured and compared the effects of Centering Prayer to exercise on undergraduate student's everyday stress. Research suggests that university students experience high levels of stress and anxiety (Asif et al., 2020).

This study hypothesized that both the practice of Centering Prayer or exercise would reduce everyday stress in undergraduate students, and that Centering Prayer and exercise would be equally as effective.

"I found that doing exercise regularly helped energize me and motivate me for the rest of the day"

Method

This study initially contained 37 participants (19 in the Centering Prayer group and 18 in the exercise group). Several participants withdrew so the study ended 29 participants (12 in the CP group and 17 in the exercise group), all undergraduate students at The King's University. Interestingly, the Centering Prayer group had a high attrition rate (36.8%) whereas the exercise had a low attrition rate (5.5%).

Participants were randomly assigned to the Centering Prayer or deliberate exercise group, which each practiced for 20 minutes every day over a 6-week period. This study was conducted with a pre- and post-test design, participants filled out 3 questionnaires prior to the commencement of the study (pre-test) and upon completion of the study (post-test). Everyday stress was measured using the Perceived Stress Scale (PSS) (Cohen & Williamson, 2011) and the State Trait Anxiety Inventory (Spielberger et al., 1983). The State (SAI) and Trait (TAI) portions of the STAI were measured separately.

Results

The results of this study were analysed through an analysis of variance (ANOVA) and suggest that both Centering Prayer and exercise reduced the participants stress on all three measures.

The PSS showed a significant decrease in stress in both groups ($p \leq 0.00$) with a large effect size ($\eta^2 = 0.709$). The SAI displayed a significant decrease in stress in both groups ($p \leq 0.00$) with a large effect size ($\eta^2 = 0.704$). The TAI also showed a significant decrease in stress in both groups ($p \leq 0.00$) with a large effect size ($\eta^2 = 0.709$).

The data from this study showed that there was no significant difference in the effects on stress for all three measures between the Centering Prayer and exercise groups (PSS $p \leq 0.667$, SAI $p \leq 0.391$, TAI $p \leq 0.472$), confirming our hypothesis that both would be equally as effective.

"I plan to continue practicing Centering Prayer after this study because I think doing Centering Prayer this semester has been very beneficial for me"

Discussion

This study showed that both Centering Prayer and deliberate exercise reduced stress following a 6-week practice, as we hypothesized. The results of this study also confirm our hypothesis that Centering Prayer and exercise would be equally as effective in reducing stress. Thus, both Centering Prayer and exercise could be used as successful interventions for reducing stress in undergraduate students. If not the first, this was one of the first studies comparing the effects of Centering Prayer to exercise on stress.

The Centering Prayer group had a much higher dropout rate when compared to exercise (36.8% compared to 5.5%), so perhaps exercise should be recommended over Centering Prayer, but more research needs to be done to explain the different attrition rates. Universities should consider encouraging contemplative practices and exercise for students rather than overly relying on counseling or medication.

Christian contemplative practice is under researched and relatively unknown compared to mindfulness. Further research on the effects of Centering Prayer on stress could broaden treatment options for clinicians. Hopefully, this research will inspire future research on the effects of Centering Prayer on stress and how it compares to other more researched stress reduction interventions such as exercise and other forms of meditation.

"Over the 6 weeks of doing this study, I was less stressed and actually started doing better in school."

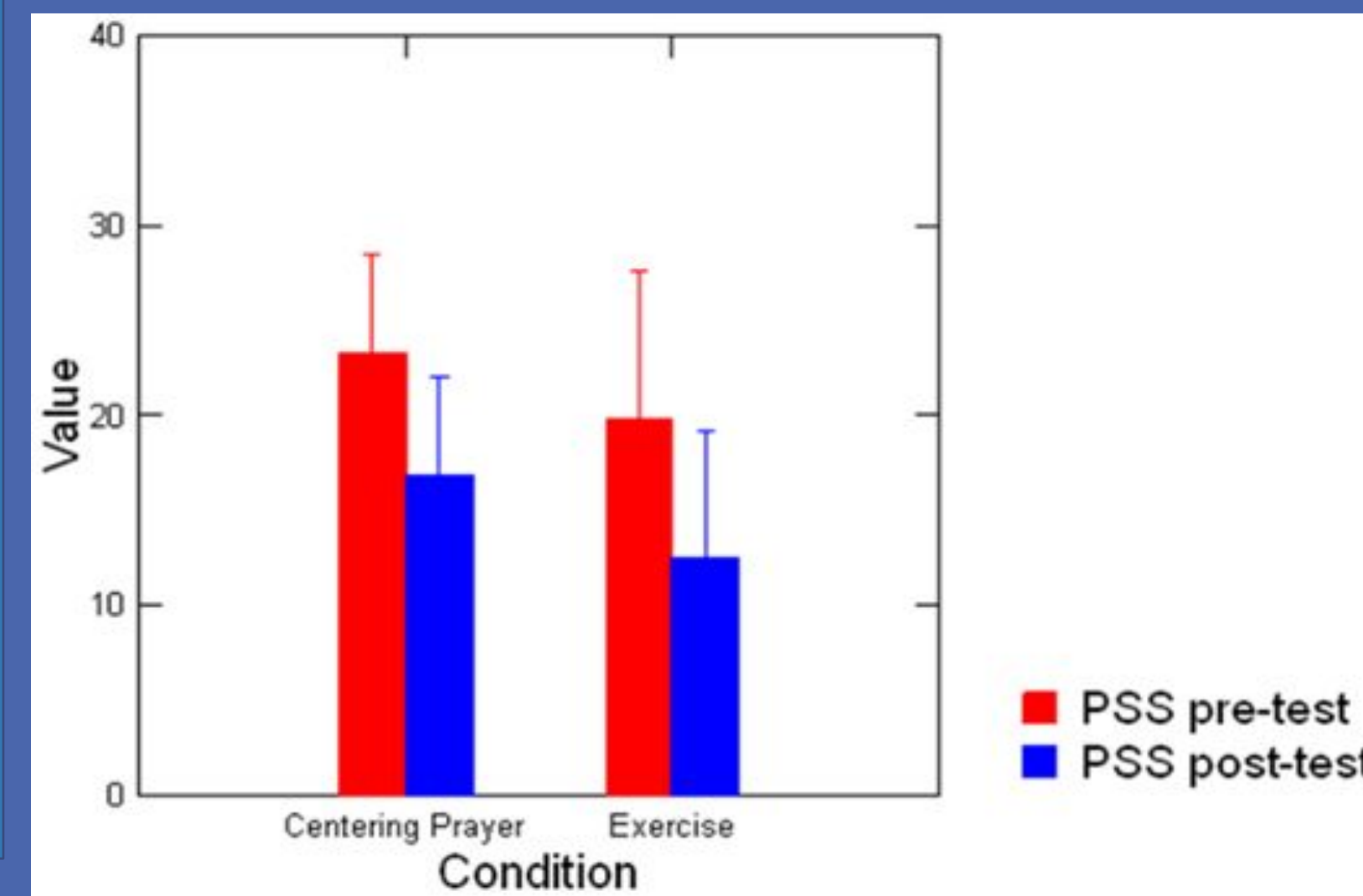


Figure 1. Perceived Stress Scale Difference

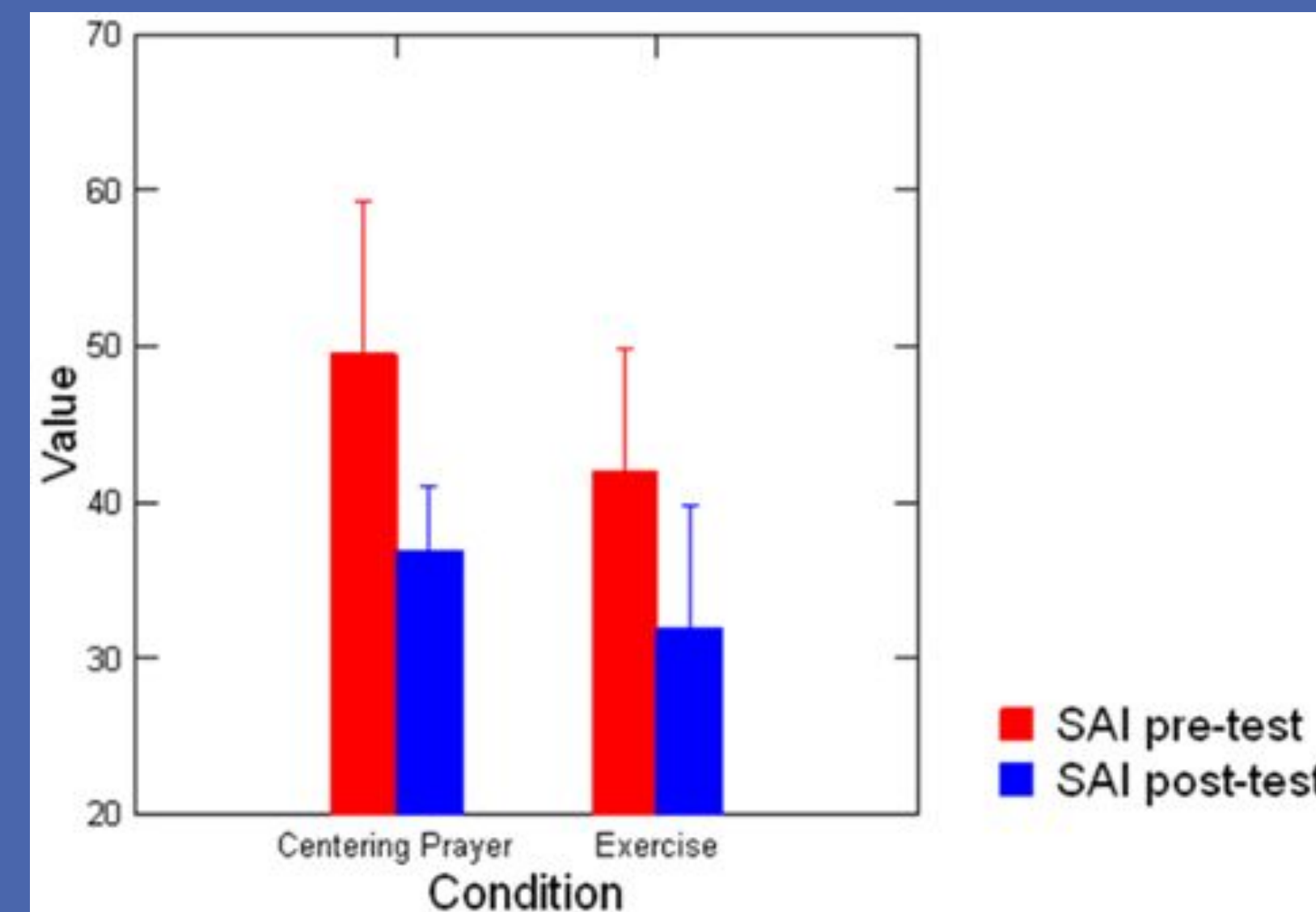


Figure 2. State Anxiety Inventory Difference

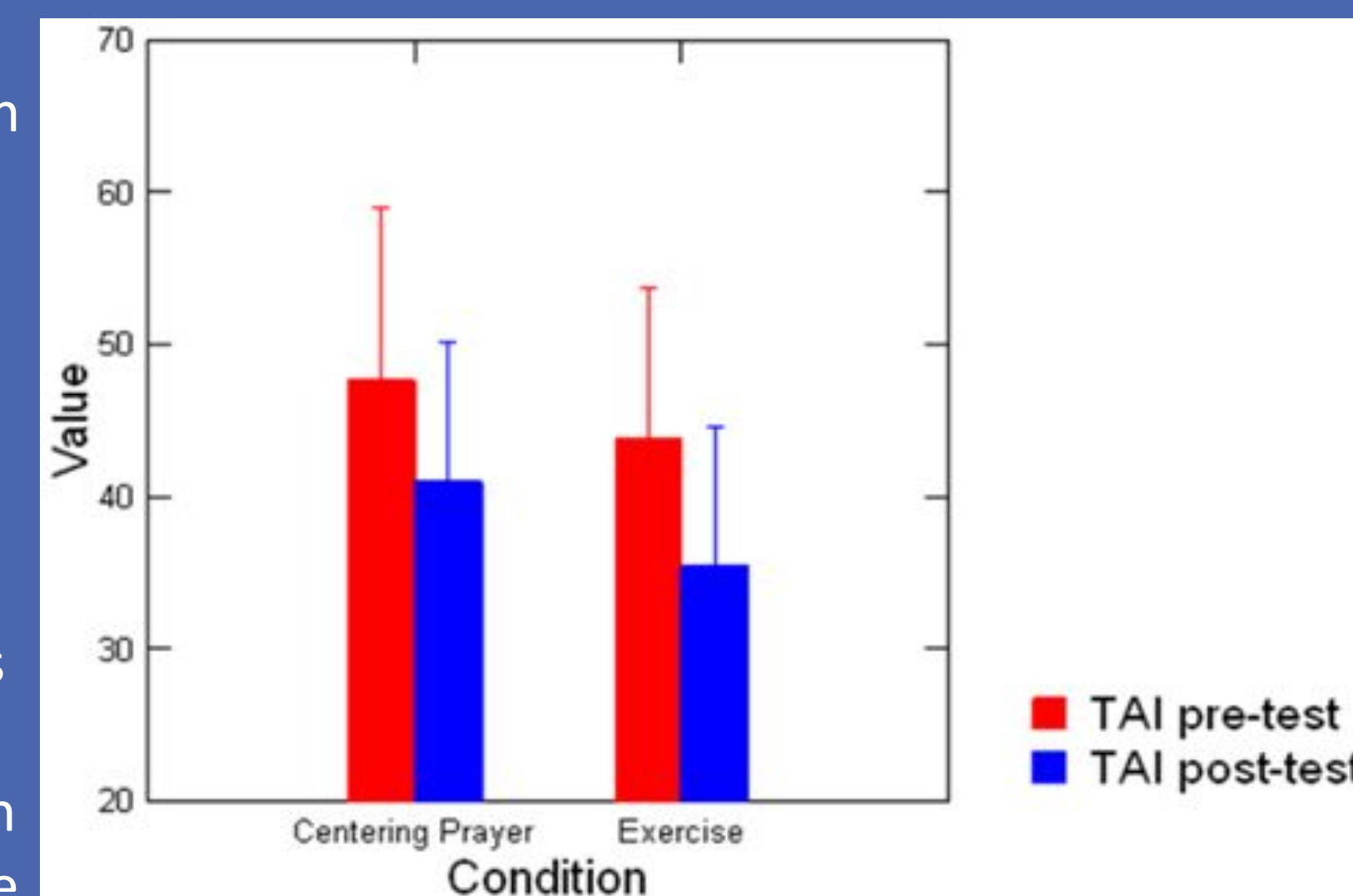


Figure 3. Trait Anxiety Inventory Difference

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