Reducing Test Anxiety Through Mind Relaxation

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Introduction

Significance of the Topic

Anxiety and stress are relative in situations that provoke emotions of “fight or flight” (Selye, 1976). Nursing course exams often elicit these feelings to high levels of anxiety. Tai Chi has been demonstrated to reduce stress and anxiety; promoting “calmness, well-being, and relaxation” (Wall, 2005; & Wang, Taylor, Pearl, & Chang, 2004).

Purpose

The aim of this study was to identify the effect of a Tai Chi (mind relaxation) intervention on bachelor of science nursing student’s test anxiety.

Key Terms & Definitions

Test Anxiety: “negative subjective feeling of fear or worry” (Cassady & Johnson, 2001; Driscoll, 2007; Gibson, 2014).

Tai Chi (mind relaxation): form of Chinese exercise that incorporates “slow, smooth body movements to achieve a state of relaxation of mind and body” (The Free Dictionary, n.d.).

Framework

Yerkes-Dodson Law (1908), reveals low and high levels of anxiety hinder optimum performance, while enhanced performance occurs at mid-levels of anxiety. This model provides support in aiding students to achieve the mid range level of anxiety improving success in testing situations.

Methodology

Research Design/Interventions

- Experimental Research Design
- 15 minutes of Tai Chi intervention
- Level of anxiety prior to exam

Research Questions

1. Is there a difference in experimental participants 0-10 anxiety scale score and pulse rate before and after Tai Chi mind relaxation?

2. Is there a difference in experimental and control pulse rate, STAI, and 0-10 anxiety baseline scores?

3. Is there a difference between experimental and control group 0-10 anxiety score and pulse rate prior to exam?

Sample

BSN students enrolled in Nurs 330 Health & Illness II.

N= 22
n= 11 Tai Chi Intervention
n= 11 Normal Pre-test Activity

Data Collection

- IRB approved Fort Hays State University
- Recruited – orientation to N330 course (script)
- Informed Consents signed
- Random selection of number identifier

Data Collection Tools

- Use of Westside Test Anxiety Scale
- Oximeter

Results/Findings

Students completed: Generalized Anxiety Scale, 0-10 Anxiety Scale, and obtained pulse rate via pulse oximeter.

- Simple Random Assignment of students
- Test administered

Simple Random Assignment of students

Exam Days: Experimental group 30 minutes prior to exam – obtained pulse and rated anxiety on 0-10 scale.

Participated in 15 minutes of Tai Chi intervention

Repeated pulse rate and 0-10 anxiety scale.

Exam Days: Control group recorded pulse rate and 0-10 anxiety score prior to exam

Data Analysis

Anxiety Level

Pre-post Intervention

10 Anxiety Score

0-10 Anxiety Scale

0 2 4 6 8

Baseline Scores

Experimental

Control

- Thirteen students - Control - Experimental – 3
- Mean scores reflected a significant difference in level of anxiety between the groups.
- T-test noted a difference in anxiety levels between the groups, but not statistically significant.
- Heart Rates demonstrated limited variability between the groups and pre-post intervention

Discussion

Implications For Nursing

A positive association between mind relaxation and a reduction of test anxiety to a level that improves student outcomes, strengthens its role in various educational venues.

Limitations:

- Research Design
- Time of recruitment
- Number of participants
- Data Collection Tools

Recommendations:

- Use of Quasi-experimental design
- Orientation closer to first exam
- Use of Westside Test Anxiety Scale
- Oximeter

Conclusion

Tai Chi has been shown to be effective in reducing stress and anxiety in education and across the life span. (Wall, 2005; Wang, Taylor, Pearl, & Chang, 2004; Mulcahy, Gosselin, Holland, & Piltman, 2016).

Consistent with Prato & Yucha (2013) findings, the Tai Chi intervention demonstrated to be statistically significant in lowering college age student’s test anxiety.

References


