Effects of Mindfulness Training on Perceived Stress & Performance-Related Attributes in BSN Students

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The Problem:
Stress in Nursing Students & Nurses

• Negative impact on performance-related attributes
  • Poor attention & concentration
  • Decreased memory
  • Decreased problem-solving abilities

• Continues into nursing practice
  • Overwhelming clinical responsibilities
  • Continuing education requirements
  • Challenging work schedules
  • Professional incivility
Research Question

Is there a difference in perceived level of stress (LOS) and performance-related attributes for baccalaureate nursing students who received mindfulness training and those who did not?

Performance-related attributes:

- Anxiety
- Attitude
- Concentration
- Information Processing
- Motivation
- Self-testing
- Selecting Main Ideas
- Study Aids
- Time Management
- Test Strategies
Research Design

- Pretest/posttest true experimental design
- Experimental group received 8 consecutive weeks of mindfulness training for 1.5 hours
- Control group met for same 8 consecutive weeks in study sessions for 1.5 hours
- Both groups completed same pretest (prior to meetings) and posttest (at 16 weeks) evaluations
Setting and Sample

- Small health professions college in Southeastern Virginia
- Small convenience sample $N = 12^*$
- Junior nursing students
- Entering first clinical experience

* Age of study participants
  - Combined mean age was older than 30 as compared to other traditional prelicensure BSN programs (National League for Nursing, 2014)
Data Collection

Derogatis Stress Profile (DSP; Derogatis, 1984)

- 77-item
- Self-reported stress
- Three interactional components
  - Environmental events
  - Personality mediators
  - Emotional responses
- Subjective stress
- Total stress
Data Collection

Learning and Study Strategies Inventory (LASSI; Weinstein & Palmer, 2002)

• 80-item
• Self-reported study strategies
• Three components
  • Skill
  • Will
  • Self-regulation
• Covert & overt thoughts, behaviors, attitudes, beliefs
DSP Dimension Level Findings

Experimental Group

Reductions in mean LOS in 9 of 11 dimensions (81.8%)
- Time pressure, attitude posture, relaxation potential, role definition, vocational satisfaction, domestic satisfaction, hostility, anxiety, depression
- Anxiety lowered from AA to BA LOS

Control Group

Reductions in mean LOS in 3 of 11 dimensions (27.3%)
- Time pressure, vocational satisfaction, depression

Gains in 4 of 11 dimensions (36.4%)
- Time pressure, attitude posture, health posture, hostility
Experimental Group

Control Group

$p < .001$

$p = .683$
DSP Global Level Findings

Experimental Group

Reductions in all measures (100%)

Subjective stress: Lowered to BA LOS
Total stress: Lowered to BA LOS

Control Group

No significant reductions

Subjective stress: Moderate reduction within A LOS
Total stress: Moderate reduction within BA LOS
Experimental Group

Control Group

$p = .014$

$p = .154$
LASSI Findings

Experimental Group

Mean gains in 9 of 10 subscales (90%)
Anxiety, attitude, concentration, information processing, self-testing, selecting main ideas, study aids, time management, test strategies

Control Group

Mean gains in 7 of 10 subscales (70%)
Anxiety, attitude, concentration, information processing, self-testing, study aids
Interpretation

DSP

- Experimental group exhibited greater reductions in level of stress at dimension, domain, & global portions

LASSI

- Both control & experimental group exhibited a strengthening of learning & study strategies
- Experimental group exhibited a greater level of strengthening
Implications for practice

• Mindfulness training should be offered as an integral supportive resource in any school curriculum

“School-based mindfulness training appears to offer a means for students to cultivate attentional skills as well as an array of other aptitudes that may enhance their capacity to cope with their psychosocial as well as academic challenges.”
(Meiklejohn et al., 2012, p. 304)
Implications for practice

• Transformation in student population
  • Section 504 of the Rehabilitation Act of 1973
  • Improve
    – Cognitive & psychological abilities such as concentration (Singleton et al., 2014)
    – Time management (Gregg, Callaghan, Hayes, & Glenn-Lawson, 2007)
    – Social skills in adolescents with learning disabilities (Beauchemin et al., 2008)
  • Decrease
    – Anxiety & mood problems, such as depression (Hofmann, Sawyer, Witt, & Oh, 2010)
Questions

Thank you for attending

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