

STRESSFUL SUCCESS: CDE PREPARATION VIEWED THROUGH PHYSIOLOGICAL STRESS



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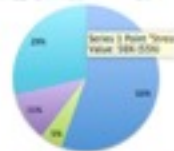


Introduction/Framework

- SBAE teachers possess high levels of job satisfaction (Sorenson & McKim, 2014) but job related stress specific to CDE preparation (King, Rucker, & Duncan, 2013)
- CDE preparation time, expectations, and utilization as an accountability measure all drive stress (Croom, 2003; King et al., 2013; Straquadine, 1990)
- High stress levels negatively impact work performance and personal health but little investigations beyond self-reported stress exist (Jarczok et al., 2013; Kyriacou, 2001)
- Conceptual framework informing the study was the Process of Preparing CDE Teams (Ball & Bowling, 2015)
- Framework identifies simultaneous preparation strategies and intervening issues when preparing CDE teams

Methodology

- Collective Case Study
- Concurrent Triangulated Mixed Methods Design (QUAN + QUAL)
- SBAE teachers with previous CDE success ($n = 3$)
- Students preparing for and competing in state competition ($n = 10$)
- Farm Management, Floriculture, and Nursery/Landscape CDE Team
- QUAN—ambulatory heart rate monitors reported respiration rate, heart rate, heart rate variability, and physical movement during pre-competition preparation, state competition, post-competition recovery, and sleep
- QUAN—researcher trained analysis of physiological indicators
- QUAL—participant daily journals opened coded using a critical incident technology
- QUAL—researcher field notes including competition timeline
- QUAL—trustworthiness upheld



Teacher 1



Teacher 3

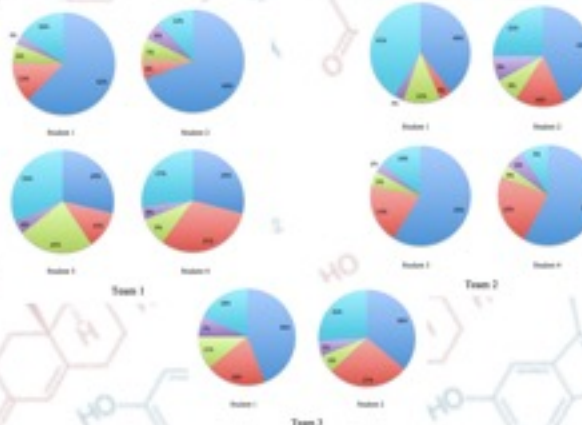


Teacher 2

Results

Within the 24-hour time period around the state competition:

- Teachers exhibited high stress reactions (39% - 79%)
- Teachers experienced little to no recovery (0% - 36%)
- Teacher alcohol consumption and sleep disruption due to caring for infant influenced lack of recovery
- Students exhibited high stress reactions (29% - 70%)
- Students experienced little recovery (4% - 31%)



Purpose & Research Questions

The purpose of this exploratory study was to contextualize the experiences of CDE coaches and participants during state level CDE competitions through the lens of stress and resilience.

The central question which drove this study was:

What is experienced related to stress and resilience during state CDE competitions?

Conclusions/Implications

- Teachers and students experienced CDE specific stress causing a lack of recovery and depletion cycle of energy
- Teachers utilized potentially ineffective and harmful coping mechanisms
- Depletion cycle and coping mechanisms influence health, wellness, and teacher effectiveness (Jarczok et al., 2013)
- Even in the face of stress adversity these teachers prepared successful CDE teams and students experienced CDE success at the state level

Recommendations

- Expand investigations to include more CDE teams and investigate the influence of teacher stress and competition on student physiological stress
- Investigate the role of stress correlating to effective CDE coaching and teacher effectiveness
- Developing professional development training focusing on stress mitigation strategies