

# Substance Use Disorder in Student Registered Nurse Anesthetists: Development of a Cross-Sectional Survey to Determine Prevalence and Analysis of Risk Factors



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## Background

- ❖ Substance use disorder (SUD) poses an occupational hazard amongst Certified Registered Nurse Anesthetists (CRNAs).
- ❖ 15% of anesthesia providers will struggle with substance use disorder.
- ❖ The use of opioids, ketamine, propofol, benzodiazepines and inhaled anesthetic agents is on the rise among anesthesia providers.
- ❖ This risk is attributed to ease of access to medications, while working in a high stress environment.
- ❖ Substance use disorder among anesthesia providers typically begins after 10 years of practice.
- ❖ SRNAs enrolled in a nurse anesthesia doctoral program experience increased stress, anxiety, and low well-being.
- ❖ Notable levels of stress and compromised wellbeing during these formative years can predispose students to an increased risk of maladaptive coping mechanisms such as substance use.

## Problem

- ❖ There is a significant gap in literature regarding substance use among Student Registered Nurse Anesthetists (SRNAs).
- ❖ Majority of substance use disorder surveys focus on credentialed practitioners but fail to provide information regarding SRNAs.
- ❖ There is limited research of risk factors for substance use disorder such as demographics, stress and wellbeing among SRNAs
- ❖ Substance use among nurse anesthetists poses a significant occupational risk to patient safety, professional integrity, and individual provider well-being.

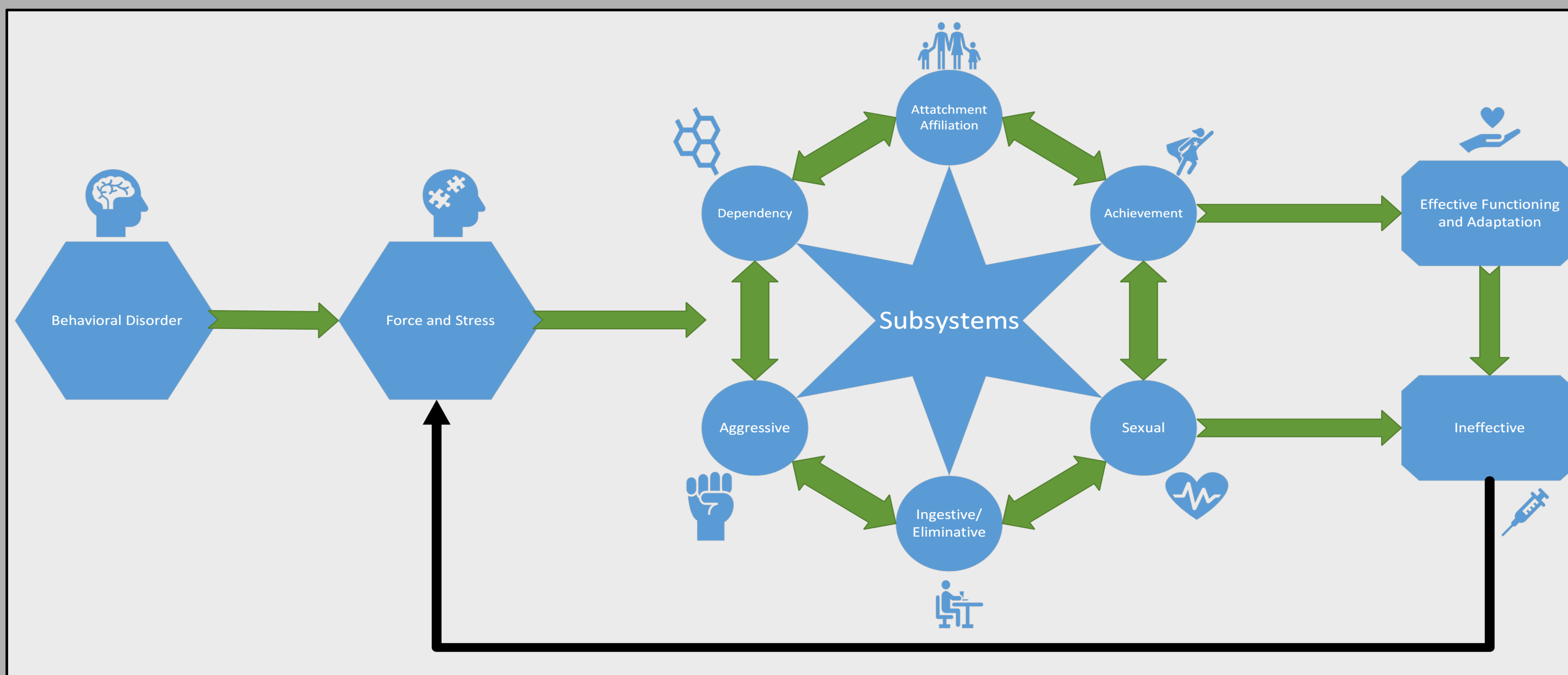
## Purpose

The purpose of this project is to determine the prevalence and associated risk factors for substance use disorder in SRNAs



## Methodology

- ❖ This is a cross-sectional, observational study used to investigate the prevalence of substance use disorder amongst Student Registered Nurse Anesthetists (SRNAs) through distribution of a questionnaire.
- ❖ The population being investigated is 3,000 SRNAs across the nation at various phases of their respective programs but have not graduated or passed their board credentialing.
- ❖ Data collected will include demographics, the PSS-10, and the DAST-10. The PSS-10 and DAST-10 are validated questionnaires used in substance use research.
- ❖ De-identified questionnaires will be distributed using Qualtrics survey software with the assistance of the American Association of Nurse Anesthetists (AANA) dispersion tool.
- ❖ Multiple submissions will be prevented using a security feature provided by the Qualtrics software and email distribution of the de-identified link and subsequent reminder email will be generated by the AANA survey services.
- ❖ All information will be stored securely, and all responses will remain anonymous.
- ❖ Funding for the survey will require the Dean Hayden Student Research and Evidence Based Practice Grant awarded by the AANA



## Conceptual Framework

- ❖ Dorothy Johnson's Theoretical Framework provides a foundation for identifying the complex interrelations between various behavioral patterns along with exacerbating factors.
- ❖ The goal of this model is to restore and maintain balance among subsystems.
- ❖ People can be viewed as behavioral beings containing the seven subsystems and behavioral system.
- ❖ According to Johnson health is determined by the interaction of various psychological, social, biological and physiological factors. Illness can be defined as a behavioral system imbalance/ instability.
- ❖ Due to the close interconnectedness of individual subsystems, a disturbance in one will result in an effect on other sub-systems.

## Discussion

- ❖ High stress levels and low wellbeing in students can lead to increased risk of maladaptive coping mechanisms such as substance abuse
- ❖ Substance use among SRNAs may be underreported due to fear of stigma or repercussions
- ❖ Limited research exists in substance abuse and stress among SRNAs
- ❖ This study aims to fill the gap in recent literature by using the DAST-10 and PSS-10
- ❖ The research aims to lay a foundation for addressing substance use disorder and stress in SRNA



## Implications for the Profession

- ❖ Our research is intended to reveal prevalence, patterns, and contributing factors to substance use in this demographic.
- ❖ We aim to highlight the importance of early detection, prevention, and tailored interventions.
- ❖ This study could pave the way for further research into SUD among other graduate nursing students. The methodologies, insights, and lessons learned from this study can serve as a valuable foundation for broader investigations into SUD within different subsets of the nursing student population, enabling a more comprehensive understanding of this issue across various contexts.

## References and Survey



*The AANA Helpline—800-654-5167—is available 24/7 for a live, confidential response with support, information, and helpful resources for drug and alcohol concerns.*