

# Self-Efficacy in Student Nurse Anesthetists

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## Problem

Student nurse anesthetists (SRNAs) in the AdventHealth University Doctor of Nurse Anesthesia Practice (DNAP) are in a rigorous 36-month program and are under prolonged stress.

This stress could ultimately affect self-efficacy, which can impact students' ability to successfully complete the program.

Self-efficacy is one's belief to accomplish a goal.

## Literature Review

In a survey completed by 1,374 members of the AANA (American Association of Nurse Anesthetists), approximately 48% of SRNAs reported depression and 21% suicidal ideation while in school.

Consequences of stress include anxiety, decreased concentration, and headaches, which can negatively impact students' performance in school. To prevent attrition, self-efficacy should be addressed since it has been shown to be predictive of increased academic performance.

Students with low self-efficacy were less likely to complete their academic program compared with those with higher self-efficacy. Self-efficacy has been shown to increase with social support.

## Methods

Subjects were students in the 2022 cohort of AdventHealth University's Doctor of Nurse Anesthesia Practice Program.

Pre-GSE (General Self-Efficacy Scale)



3 Optional Videoconferencing Group Interventions



Post-GSE



Kruskal-Wallis Test

## Results

The pre-GSE was completed by 25 out of 28 students and the post-GSE was completed by 17 students.

Eight students were excluded from the analysis because they did not complete the post-GSE.

The three group sessions had 13, 10, and 5 students, respectively. Of the 17 students, six attended zero sessions, two attended one session, four attended two sessions, and five attended three sessions.

The mean pre-GSE score was 32 and the mean post-GSE score was 34.

## Illustration

Ranks

	Attendance	N	Mean Rank
Change	.00	6	10.33
1.00		2	3.50
2.00		4	12.50
3.00		5	6.80
Total		17	

## More Results

Since eight students had to be removed due to missing post-GSE data, the resulting sample size of 17 was too small for ANOVA. Thus, the nonparametric equivalence. Kruskal-Wallis Test was used.

This resulted in a Chi-Square of 5.725 and a p-value of .126 which is greater than the .05 level of confidence. Therefore, the results were not statistically significant, and no conclusion can be drawn.

## Illustration

Test Statistics<sup>a,b</sup>

	Change
Chi-Square	5.725
df	3
Asymp. Sig.	.126

a. Kruskal-Wallis Test

b. Grouping Variable: Attendance

## Discussion & Implications

The purpose of this scholarly project was to determine if a significant difference exists in general self-efficacy scores across groups with varying numbers of group interventions focused on CREATION health principles and its effect on self-efficacy.

In the AHU DNAP program, clinical rotations are supposed to start in the third trimester, but due to COVID-19, clinical rotations were postponed. Thus, when this project was implemented, the students were not doing clinical rotations. However, an additional class was moved to that trimester, and they still maintained a rigorous schedule without any wellness incorporated into their curriculum.

The pre-GSE was completed by 25 students. The post-GSE was completed by 17 students. Eight students were excluded from the analysis because they did not complete the post-GSE. There was no statistical significance between the pre-GSE scores and post-GSE scores. The limitation in this project was sample size and attrition.

It is evident that SRNAs have such busy schedules that it can be a challenge to even set aside time to complete a survey.

## Conclusions

Further research is needed to determine the effectiveness of group interventions for SRNAs. The scholarly project committee suggested the possibility of future cohorts picking this project up and build on it under more normal circumstances, where students are in the clinical settings

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