

Videoconferencing Group Intervention and Self-Efficacy in Student Nurse Anesthetists

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### Abstract

Student nurse anesthetists (SRNAs) in the AdventHealth University Doctor of Nurse Anesthesia Practice (DNAP) are in a rigorous 36-month program that consists of classes, exams, assignments, clinicals, and scholarly projects. They are under prolonged stress, and there is little time for SRNAs to address their wellness. It would be of interest to education programs to know whether the integration of wellness with group intervention will be beneficial for their students.

Due to the persistent and high levels of stress experienced by SRNA within the DNAP program, wellness is specifically addressed within the curriculum during the first and second trimester. However, in the third trimester, wellness is no longer integrated within didactic content. This gap coincides with the beginning of clinical experiences resulting in an increase in program demands with nothing holding students accountable to address their stress. This stress could ultimately affect self-efficacy, which can impact students' ability to successfully complete the program.

This scholarly project integrated wellness within the fourth trimester. Three group interventions with a focus on Choice, Interpersonal Relationships, and Outlook from the CREATION Health model were employed. The General Self-Efficacy Scale (GSE), a validated, self-reported 10-item questionnaire, was administered pre-intervention and post-intervention. A Kruskal-Wallis Test was used to determine if a significant difference exists between pre- and post- general self-efficacy scores within the AdventHealth University 2022 DNAP cohort across groups with varying numbers of group interventions attended during a three-month period, but due to limitations including lack of post- GSE scores, results were inconclusive.

### Group Intervention and Self-Efficacy in Student Nurse Anesthetists

Student nurse anesthetists (SRNAs) in the AdventHealth University Doctor of Nurse Anesthesia Practice (DNAP) are in a rigorous 36-month program. They are under stress and there is little to no time for anything else.

In the first trimester, it is a requirement to read CREATION Health Discovery (Cummings, Reed, and Chobotar, 2014), and create personal wellness goals. In the second trimester, there are more assignments that encourage the use of CREATION Health. However, in the third trimester, clinicals are integrated with the classes, and wellness is no longer addressed. There is an increase in program demands, yet there is nothing holding students accountable to address their stress.

### **Significance & Background of Clinical Problem**

Both nurse anesthesia students and professionals are under much stress, are aware of the consequences of stress, and are seeking for ways to help manage it. In a survey sent out to AANA (American Association of Nurse Anesthetists) members, students reported the highest average stress level compared to that of educators, administrators, staff nurse anesthetists, and military (Chipas & McKenna, 2011). Further, in another survey completed by 1,374 members of the AANA, Chipas et al. (2012) found approximately 48% of SRNAs reported depression and 21% suicidal ideation while in school. Some of the consequences of stress include anxiety, decreased concentration, and headaches, which can negatively impact students' performance in school (Connor, 2015). This can affect attrition rates, and it was found that programs of longer duration had higher attrition rates (Dosch, Jarvis, & Schlosser, 2008). When there is student attrition, there is a financial loss to the student, to the education program, and to the nurse

anesthesia profession. To prevent attrition, self-efficacy should be addressed since it has been shown to be predictive of increased academic performance (Connor, 2015).

Self-efficacy is one's belief in ability to accomplish a goal (Bandura, 1982), and Harvey and McMurray (1994) found that 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 (Connor, 2015). Among nurse anesthetists, the most common method for managing stress was interaction or support from others (Chipas & McKenna, 2011). Students are inundated with schoolwork and have little time for interaction with others. When clinicals become integrated into their schedules, they feel increasingly overwhelmed. There is a need for social support for SRNAs and they may be more likely to seek the support if it is integrated into the education program.

### **PICOT Evidence Review Questions**

Two PICOT format questions guided the systematic review of literature. The first addresses the clinical problem: In nurse anesthesia students (P), does group intervention (I) improve self-efficacy (O) during clinical rotations (T)?

The second addresses the clinical innovation: Among SRNAs in the 2022 cohort attending AdventHealth University (P), does the implementation of group intervention, grounded in the CREATION Health model (I), result in a difference in self-efficacy scores (O) during a three-month period of clinical rotations (T)?

### **Search Strategies**

The search strategy included electronic search engine databases and regulatory agencies: PubMed, PsycINFO 1887-Current, and Google Scholar. Keywords and MESH combinations included: *student AND stress AND self-efficacy AND wellness AND group intervention*.

MESH terms were *student, self-efficacy, student registered nurse anesthetist, stress, wellness, and graduate student*. There were 813 articles and ten were used. Search Limits were English language and research article. Exclusion criteria included studies that included only non-students or below college level students or meditation or relaxation training. Studies used were systematic reviews, meta-analyses, pilot studies, descriptive studies, and correlation studies.

### **GRADE Criteria**

The quality of the literature was assessed using the Grading of Recommendation Assessment, Development, and Evaluation (GRADE) criteria. The initial evidence was rated high because the majority of the literature was systematic reviews, meta-analysis, and descriptive studies. The qualitative studies were not preliminarily rated down because the researchers were able to quantify their data, which allowed for a concrete statistical analysis and a better interpretation of the findings. However, after the review of literature, the quality of evidence was downgraded by 1. There were non-probability sampling or convenience sampling. Imprecisions were noted with small sample sizes. Imprecisions were also seen when some of the proposed interventions to improve self-efficacy and stress did not work. Thus, the overall quality of GRADE criteria for the review of literature was moderate (see Appendix A).

### **Literature Review and Synthesis of Evidence**

This section includes the review of the literature on self-efficacy, stress, wellness, and group interventions primarily in SRNAs. The AANA identified six components of wellness: physical, emotional, occupational, social, intellectual, and spiritual (Griffin, Yancey, & Dundley, 2017). Stress is an adaptive response to change from the norm (Connor, 2015; Chipas et al., 2012). Self-efficacy is the belief in one's ability to organize and execute the actions required to

manage prospective situations (Bandura, 1982). Self-efficacy is a theoretical framework used when there is a threat to one's ability to deal with aversive events (Bandura, 1983).

Stress is prevalent among SRNAs (Connor, 2015; Chipas & McKenna, 2011; Chipas et al., 2012; Phillips, 2010). Stress among SRNAs can lead to impaired academic performance and depression (Chipas et al., 2012). It can also lead to sleep difficulties and high anxiety, which may result in failure in completion of their education (Connor, 2015). Thus, the need to look at wellness and coping strategies is necessary.

In coping with stress, most students perceived they could not change their learning environment, but could change their personal lives (Chipas et al., 2012). Phillips (2010) focused on the coping techniques of SRNAs and peer support was noted multiple times. In interventions that use social support, it is encouraged to communicate about experiences, thoughts, and feelings. Students who were involved in support groups reported improved coping ability, reduced stress, and decreased anxiety (Hamrin & Fournier, 2006; Rodriguez & Provident, 2018; Yusuf, Nicoloso-SantaBarbara, Grey, Moyer, & Lobel, 2019). Connor (2015) also suggested that social support can be an effective coping mechanism for those experiencing high levels of stress.

Group interventions have been effective for stress, but it is unknown if it has an effect on self-efficacy. Self-efficacy can be predictive of nursing student performance. Also, students with low self-efficacy were less likely to complete their academic program compared with those with higher self-efficacy Connor (2015). Students were more likely to strive to reach their goal if they believed they were capable of overcoming the challenges. Thus, schools should be concerned with the self-efficacy of students as it can affect attrition.

SRNAs had lower self-efficacy during their clinical portion of their program than during their didactic portion (Imus, Burns, & Weglarz, 2017). Since prolonged stress is prevalent among SRNAs, and Bandura (1997) suggests that stress can influence self-efficacy, it would be of most interest to nurse anesthesia programs to assess group intervention during the clinical portion of the nursing anesthesia program. SRNAs have suggested that programs should provide peer support and integrate wellness into the program (Chipas et al., 2012). Also, there is a correlation between wellness and self-efficacy (Chipas & McKenna, 2011; Chipas et al., 2012; Griffin et al., 2017), but there is a lack of research on the effect of wellness-based group intervention on self-efficacy in SRNAs. By exploring the relationship between wellness-focused group intervention and self-efficacy in SRNAs, it can be helpful to nurse anesthesia programs in increasing the chance of SRNAs' success.

CREATION Health is a faith-based wellness model that is introduced in AdventHealth University's DNAP. Aspects that can be focused on in a group intervention include Choice, Interpersonal Relationships, and Outlook. In CREATION Health, choice is taking charge of one's health and identifying areas that are detrimental. Interpersonal Relationships involves focusing on the quality of one's relationships. Outlook involves looking at the world in a positive perspective (Cummings, Reed, & Chobotar, 2014). A person's life outlook and belief that one can overcome obstacles may lead to wellness more than simple avoidance of stress (Connor, 2015). Most interventions lasting 8 weeks or more were no more effective than those lasting fewer than 8 weeks in reducing anxiety or perceived stress (Yusufov et al., 2019). Thus, Choice, Interpersonal Relationships, and Outlook can be covered in three group interventions during three months of clinical rotations.

### **Applicability to Practice/Contribution to Professional Growth**

SRNAs are under prolonged stress that is negatively affecting them physically and emotionally. As most nurse anesthesia programs have transitioned from the master's level to the doctorate level, the length of time in school has increased from two years to three years. SRNAs need to endure stress and its consequences for a longer time while working towards their goals. Further, students in integrated programs experienced significantly more stress than those in front-loaded programs (Chipas, et al., 2012). Many nurse anesthesia programs are integrated, and those programs are in need for wellness to be integrated in their programs.

Support groups were beneficial for reducing stress, improving coping ability, and reducing anxiety in nursing and graduate students (Hamrin & Fournier, 2006; Rodriguez & Provident, 2018; Yusuf et al., 2019) and perceived wellness and self-efficacy were positively correlated (Griffin et al., 2017). Since AdventHealth University encourages the use of CREATION Health, it would be of interest to explore its impact on SRNAs. By exploring the relationship between group intervention focused on CREATION Health and its effect on self-efficacy, AdventHealth University can improve on their strategies for promoting wellness among their students.

### **Project Aims**

The aim 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 wellness and self-efficacy and make evidence-based recommendations appropriate to those findings. The General Self-Efficacy Scale (GSE) was given pre-intervention and post-intervention. This scholarly project's objectives were:

1. Determine if there is a significant difference between pre- and post-general self-efficacy scores within the AdventHealth University 2022 DNAP cohort across groups



with varying numbers of group interventions attended during a three-month period of clinical rotations by September 2020.

2. Make evidence-based recommendations to the AdventHealth University doctor of nurse anesthesia program faculty for the support of SRNA's self-care management within the DNAP program by February 2021.

### **Methods**

This scholarly project is a quantitative pilot study. Subjects were students in the 2022 cohort of AdventHealth University's Doctor of Nurse Anesthesia Practice Program.

Participation was voluntary. For the purposes of this scholarly project, the independent variable was the group intervention and the dependent variable was self-efficacy.

During the third trimester, due to COVID-19 and all classes being virtual during that time, a "Leave Behind" was emailed to the 2022 DNAP cohort to provide information about this scholarly project (see Appendix B). At this time, student e-mail addresses were input into SurveyMonkey for ease of survey dissemination. During the first week of the fourth trimester, prior to the group sessions, the co-investigators distributed the pre-GSE to all students via email from SurveyMonkey and included an informed consent. Prior to each group intervention, participating students electronically signed a consent form. The consent form stated that all discussions during the group interventions and data will remain confidential. The consent forms were exported to a password protected cloud drive on the university's internal server.

Subjects were allowed to participate in zero to three optional group interventions, and participation was recorded via signed informed consent. Amazon gift cards were raffled as an incentive to participate (see Appendix C). The post-GSE survey was administered via email from SurveyMonkey after the completion of all group interventions. The number of group

interventions attended was used to determine if a difference exists in the students' self-efficacy at baseline prior to the group interventions with their self-efficacy after the optional group interventions.

### **General Self-Efficacy Scale Tool Validation and Consent for Use**

The General Self-Efficacy Scale (GSE) by Schwarzer & Jerusalem (1995) is a self-report measure of self-efficacy (see Appendix D). It is a 4-point Likert scale questionnaire with 10 items, each rated on a scale of 1 to 4, 1 not at all true, 2 hardly true, 3 moderately true, and 4 exactly true. The total score is calculated by finding the sum of all items, and the total score ranges between 10 and 40. The GSE is reliable, with Cronbach's alphas ranged from .76 to .90, with the majority in the high .80s, and validated, with correlations derived from a sample of East German migrants in 1989 and 1991 (Schwarzer, 2009; Schwarzer & Jerusalem, n.d.). Permission has been granted to use the GSE for non-commercial research and developmental purposes (Schwarzer, 2014).

### **Privacy, Data Storage, and Confidentiality**

Only the principle investigator and the co-investigators have access to this data. The co-investigators collected the data from SurveyMonkey. All data from the informed consents and SurveyMonkey were de-identified prior to being exported to a password protected cloud drive on the university's internal server for statistical analysis by the university statistician. This data will be retained for 5 years per AdventHealth University Institutional Review Board requirements, then auto deleted.

### **Data Analysis Methods**

Statistical procedures for data analysis included a One-Way ANOVA utilizing SPSS V21.0 to see if GSE scores differ depending on the number of interventions attended. A power

analysis with alpha at .05, power at .90, and a medium effect size of .5, recommends a sample size of 61. However, this scholarly project utilized a convenience sample of 17, as AdventHealth University DNAP 2022 student cohort, consists of only 28 students and therefore, cannot meet the recommended sample size requirement.

To eliminate bias, all AHU faculty who know about the project were asked not to mention it to the students involved. Communication was limited to email and only for the questionnaire and scheduling purposes.

### **Planning and Procedures/Limitations**

#### **Planning**

The counselor and chaplain for AdventHealth University were chosen to facilitate the group interventions. Since they are independent from the nurse anesthesia program, students may be more willing to be honest which could result in a more effective group intervention.

A grant was received for access to SurveyMonkey and for Amazon gift cards as an incentive for participation in the surveys and group interventions. (See Appendix E for a detailed breakdown of costs.)

#### **Implementation**

During the last month of their third trimester, we emailed the students a “Leave Behind” with information about the project. The pre-GSE was distributed during the first week of their fourth trimester, prior to the group interventions. The group interventions occurred during a two-month timeframe during the fourth trimester. After the third session was completed, the post-GSE was distributed.

The sessions ranged from 45 minutes to one hour and were held on BlueJeans, a videoconferencing platform. During each session, one of the items from CREATION Health -

Choice, Interpersonal Relationships, and Outlook, respectively, were addressed (Florida Hospital Mission Development, 2012; Florida Hospital Mission Integration & Culture, 2016). (See Appendices G-I for outlines for each session.). Each session was independent from each other so that students could attend any of the sessions, and could attend zero, one, two, or three sessions.

### **Barriers and Facilitators**

The busy schedule of nurse anesthesia students was a barrier to participation. The time the project was implemented was also the time when COVID-19 caused students to be removed from clinical and classes were held virtually. Instead of clinicals, the DNAP Cohort of 2022 had an additional class added to their fourth trimester. Due to COVID-19, group sessions were switched from face-to-face to videoconference which may have been a facilitator because it is more accessible. It may have also been a barrier since many people were unfamiliar with videoconferencing.

### **Procedures to Sustain/Timeline**

Strategies used to sustain our intervention included avoiding scheduling group interventions on the day before an exam and raffling off Amazon gift cards to participants. See Appendix F for a detailed timeline.

### **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. Six students 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.

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. The results were not statistically significant, and no conclusion can be drawn.

### **Discussion**

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. However, due to a small sample size and attrition, we cannot draw a conclusion based on the statistical analysis.

It was surprising that 25 students responded to the pre-GSE survey, but only 17 students responded to the post-GSE survey. This resulted in a smaller sample size than anticipated and thus, resulted in the inability to make a conclusion on whether there is a statistically significant difference between pre- and post- GSE scores within the AdventHealth University 2022 DNAP cohort across groups with varying numbers of group interventions attended. Further, evidence-based recommendations cannot be made to the AdventHealth University doctor of nurse anesthesia program faculty for the support of SRNA's self-care management within the DNAP program.

The purpose of this project was to see if group interventions among nurse anesthesia students would improve self-efficacy during clinical rotations. In the AdventHealth University 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.

Even though conclusions cannot be made from the statistical analysis, it is evident that nurse anesthesia students have such busy schedules with many academic requirements that it can be a challenge to even complete a survey. This is something to consider when trying to address wellness to this population. For those who participated, the mean pre-GSE score was 32 out of 40 and the mean post-GSE score was 34 out of 40 which is an improvement in self-efficacy. The improvement in GSE score can be due to students' progression through the program. Phillips (2010) found that as students progress through the program, their ability to cope progresses as well. The improvement in GSE score can also be from the group sessions. Since there were five students who participated in all three group sessions, this could indicate that those students did find the sessions helpful to their well-being even if it did not affect their self-efficacy.

A consideration when addressing wellness for nurse anesthetist students is that various methods can be helpful to different students. Those who participated may prefer speaking to a counselor to address their well-being and perhaps those who did not participate might prefer other methods such as social interactions with family and friends or exercise.

### **Conclusions/Limitations**

The limitation in this project was a small sample size and attrition. There were 28 students in the 2022 DNAP cohort. The sample size would not meet the sample size of 61 indicated by the power analysis, but we did not anticipate losing so many participants to attrition. Changes to the school program due to COVID-19 may have contributed to attrition. The implementation of this project was intended to occur when the AdventHealth 2022 DNAP cohort was beginning their clinical practicum. Instead, they had their clinical practicum postponed and

had an increased didactic load with extra virtual classes. Also, many DNAP students chose to work during COVID-19, but it is unknown how many from the 2022 cohort worked. Time constraints and other academic requirements was already foreseen as a potential limitation and COVID-19 may have made the students' availability more challenging.

Another factor may be the fact that the sessions took place through videoconferencing rather than in-person. People who are not familiar with group sessions or videoconferencing may have been more hesitant to participate. A systematic review showed that support group videoconferencing and in-person groups had similar outcomes (Banbury, Nancarrow, Dart, Gray, & Parkinson, 2018).

Selection bias is another limitation in this project. This study was based on voluntary responses from SRNAs. Self-selection bias is a possible barrier with this sample if there is a low response or participation rate (Griffin et al., 2017). With selection bias, the sample does not precisely represent the population.

Group interventions focused on wellness for nurse anesthesia students may or may not affect their self-efficacy. Several students voluntarily attended all three sessions and therefore, it is believed that the sessions were perceived as helpful to them. Further research is needed to determine the effectiveness of group interventions and nurse anesthesia students.

### **Dissemination**

Dissemination of this scholarly project will be presented locally to the AdventHealth University community through an asynchronous Canvas course. This will include a professional poster presentation and a scholarly project power point presentation. Dissemination will be completed in March 2021. The presentations will allow end-users the opportunity to freely discuss the scholarly project via a discussion board within the Canvas course.

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## Appendix A

## GRADE Evidence Matrix

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Purpose	Variables	Setting/Subjects	Measurement and Instruments	Results	Evidence Quality
<b>Study One:</b> Review current literature related to retention, stress, and self-efficacy and their relationship to nurse anesthesia education <b>Study Two:</b> Examine the relationship between SRNA's self-efficacy and their demographic and outcome variables	<b>Study One:</b> Primary outcome: Retention of student registered nurse anesthetists Secondary outcome: Stress, Self-efficacy, Coping and Social Support <b>Study Two:</b> Primary outcome: Self-efficacy Secondary outcome: Age, gender, academic or clinical year, years of experience as a critical care nurse, number of clinical cases, call hours, and years since attending an academic program	<b>Study One:</b> Student registered nurse anesthetists  <b>Study Two:</b> Setting: Midwestern University, Glendale, Arizona  Subjects: 57 students in the nurse anesthesia program (first-year academic students and second-year clinical students)	<b>Study One:</b> Not stated.  <b>Study Two:</b> Schwarzer and Jerusalem General Self-Efficacy Scale (GSE), voluntary completion of survey	<b>Study One:</b> Self-efficacy accounted for 11-14% of the variance in academic performance. Self-efficacy is predictive of nursing student performance.  <b>Study Two:</b> Students in their clinical years have lower self-efficacy compared with students in their didactic year.	<b>Study One:</b> <b>Methodological flaws:</b> Lacking details on methods of the literature reviewed <b>Inconsistency:</b> None <b>Indirectness:</b> None <b>Imprecision:</b> None <b>Publication bias:</b> None
Design				Implications	
<b>Study One:</b> Systematic review <b>Study Two:</b> Descriptive correlational pilot study				<b>Study One:</b> Future research on social support and stress management and its effect on self-efficacy and retention in SRNAs <b>Study Two:</b> Future research to examine self-efficacy in other nursing anesthesia programs	<b>Study Two:</b> <b>Methodological flaws:</b> Convenience sampling <b>Inconsistency:</b> None <b>Indirectness:</b> None <b>Imprecision:</b> Small sample size <b>Publication bias:</b> None

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Rodriguez, A. & Provident, I. (2018). The Effects of a Structured Coping Strategy Program for Graduate Occupational Therapy Students. <i>Journal of Occupational Therapy Education</i> , 2(1), 1-16. <a href="https://doi.org/10.26681/jote.2018.020109">https://doi.org/10.26681/jote.2018.020109</a>					
Purpose	Variables	Setting/Subjects	Measurement and Instruments	Results	Evidence Quality
<p><b>Study One:</b> Explore educational and experiential benefits for graduate nursing students as both leaders and members of peer-led support group</p> <p><b>Study Two:</b> Effects of pilot educational intervention based on the cognitive-behavioral model on second year Master of Occupational Therapy (MOT) students' awareness of adaptive coping strategies and overall well-being</p>	<p><b>Study One:</b> Leadership experience for the group leaders. Transition to graduate school, anxiety, coping skills for the group members.</p> <p><b>Study Two:</b> Primary outcome: Coping strategies for stress management</p> <p>Secondary outcome: Awareness of coping strategies, effects of stress in graduate school, overall well-being</p>	<p><b>Study One:</b> Setting: Yale University School of Nursing, New Haven, Connecticut Subjects: 11 group leaders (graduate students in psychiatric-mental health nursing specialty) and 30 group members (graduate pre-specialty nursing students)</p> <p><b>Study Two:</b> Setting: Florida International University and Chatham University Subjects: 11 second year MOT students</p>	<p><b>Study One:</b> Questionnaires after support groups met 1 hour per week for 9 weeks</p> <p><b>Study Two:</b> Brief COPE was used to establish baseline and post-intervention measurement of coping strategies among participants. Coping Strategy Survey. Six 1-hour sessions for 6 weeks</p>	<p><b>Study One:</b> Support group members reported decreased anxiety, improved coping ability, and improved ability to process interactions with preceptors and peers.</p> <p><b>Study Two:</b> Participants reported improved coping strategies for managing stress</p>	<p><b>Study One:</b> <b>Methodological flaws:</b> Convenience sampling <b>Inconsistency:</b> None <b>Indirectness:</b> None <b>Imprecision:</b> Small sample size <b>Publication bias:</b> None</p> <p><b>Study Two:</b> <b>Methodological flaws:</b> Convenience sample <b>Inconsistency:</b> None <b>Indirectness:</b> Lacking statistical analysis of results <b>Imprecision:</b> Small sample size <b>Publication bias:</b> None</p>
Design				Implications	
<p><b>Study One:</b> Descriptive study</p> <p><b>Study Two:</b> Qualitative and Quantitative pilot study</p>				<p><b>Study One:</b> Support groups can be used in nursing programs to decrease stress.</p> <p><b>Study Two:</b> Benefits of a coping strategy program, guided by the cognitive-behavioral model, for graduate students</p>	

References					
<p>Lo, K., Waterland, J., Todd, P., Gupta, T., Bearman, M., Hassed, C., &amp; Keating, J.L. (2018). Group interventions to promote mental health in health professional education: a systematic review and meta-analysis of randomized controlled trials. <i>Advances in Health Science Education</i>, 23:413-447. <a href="https://doi.org/10.1007/s10459-017-9770-5">https://doi.org/10.1007/s10459-017-9770-5</a></p> <p>Yusufov, M., Nicoloso-SantaBarbara, J., Grey, N. E., Moyer, A., &amp; Lobel, M. (2019). Meta-analytic evaluation of stress reduction interventions for undergraduate and graduate students. <i>International Journal of Stress Management</i>, 26(2), 132-145. doi:10.1037/str0000099</p>					
Purpose	Variables	Setting/Subjects	Measurement and Instruments	Results	Evidence Quality
<p><b>Study One:</b> Identify evidence that supports interventions suitable for embedding in usual health professional course curriculum and that could be delivered to groups of learners</p> <p><b>Study Two:</b> Examine the effectiveness of interventions in reducing students' anxiety and perceived stress in comparison with control conditions</p>	<p><b>Study One:</b> Primary outcome: Psychoeducational interventions, cognitive-behavioral interventions, mindfulness interventions</p> <p>Secondary outcome: Anxiety, depression, stress</p> <p><b>Study Two:</b> Primary Outcome: Control group: Self-analysis of perceived stress and anxiety investigate but with no attached interventions Sample group: compared changes in anxiety or perceived stress from before to after an intervention based on the type of intervention Technique.</p>	<p><b>Study One:</b> Setting: Most in the USA and Canada</p> <p>Subjects: Primarily entry level students of medicine and nursing</p> <p><b>Study Two:</b> <b>Setting:</b> United States, Asia, Europe, and Australia</p> <p><b>Subjects:</b> Undergraduate and graduate students</p>	<p><b>Study One:</b> State-Trait Anxiety Inventory, Depression Anxiety and Stress Scale, Perceived Stress Scale, Maslach's Burnout Inventory</p> <p><b>Study Two:</b> Measurements of anxiety and perceived stress using the State Anxiety subscale of the State-Trait Anxiety Inventory and the Perceived Stress Scale.</p> <p>Intervention technique used: CBT, coping skills training, MBSR, relaxation training, psychoeducation, or social support</p>	<p><b>Study One:</b> Cognitive-behavioral interventions effective in modifying anxiety, depression, and stress. Mindfulness interventions have a significant effect in reducing stress. Psychoeducational interventions had no significant effect on anxiety, depression, or stress.</p> <p><b>Study Two:</b> graduate students: <math>d = 1.81</math>, 95% CI [1.06, 2.56], <math>p = .001</math>; undergraduate students: <math>d = 0.57</math>, 95% CI [0.20, 0.95], <math>p = .05</math>. in reduction of anxiety and stress</p> <p><b>Implications</b></p> <p><b>Study One:</b> Cognitive-behavioral interventions may be helpful in reducing anxiety, depression, and stress. Mindfulness interventions may be helpful in reducing stress.</p> <p><b>Study Two:</b> Most interventions are effective in decreasing both anxiety and stress</p>	<p><b>Study One:</b> <b>Methodological flaws:</b> None <b>Inconsistency:</b> None <b>Indirectness:</b> None <b>Imprecision:</b> None <b>Publication bias:</b> None</p> <p><b>Study Two:</b> <b>Methodological flaws:</b> Convenience Sampling <b>Inconsistency:</b> Not all studies used a control group <b>Indirectness:</b> None <b>Imprecision:</b> Not all interventions consistently reduced both stress and anxiety <b>Publication bias:</b> None</p>

References					
<p>Chipas, A., Cordrey, D., Floyd, D., Grubbs, L., Miller, S., &amp; Tyre, B. (2012). Stress: Perceptions, manifestations, and coping mechanisms of student registered nurse anesthetists. <i>AANA Journal</i>, 80(4), 49. <a href="https://search-proquest-com.resource.ahu.edu/docview/1321120425/fulltextPDF/614CBFDCC9814446PQ/1?accountid=35793">https://search-proquest-com.resource.ahu.edu/docview/1321120425/fulltextPDF/614CBFDCC9814446PQ/1?accountid=35793</a></p> <p>Chipas, A., &amp; McKenna, D. (2011). Stress and burnout in nurse anesthesia. <i>AANA Journal</i>, 79(2), 122-8. Retrieved from <a href="https://resource.ahu.edu/login?url=https://search-proquest-com.resource.ahu.edu/docview/870702290?accountid=35793">https://resource.ahu.edu/login?url=https://search-proquest-com.resource.ahu.edu/docview/870702290?accountid=35793</a></p>					
Purpose	Variables	Setting/Subjects	Measurement and Instruments	Results	Evidence Quality
<p><b>Study One:</b> The purpose of this Exploration of the archetypal SRNA stressors by trending data in perceptions, manifestations and the coping mechanisms of stress</p> <p><b>Study Two:</b> To determine the current stress levels of CRNA and SRNA and their coping mechanisms</p>	<p><b>Study One:</b> Primary Outcome: Measurement of stress as a progression throughout program</p> <p><b>Study Two:</b> Primary Outcome: Symptoms of stress</p> <p>Secondary outcomes: Individual coping strategies</p>	<p><b>Study One:</b> <b>Setting:</b> Online forum using survey monkey</p> <p><b>Subjects:</b> Sample size of 1374 members of AANA</p> <p><b>Study Two:</b> <b>Setting:</b> Online forum using survey monkey</p> <p><b>Subjects:</b> 28000 online surveys sent out, 7537 respondents</p>	<p><b>Study One:</b> Study specific questionnaire on stress and coping</p> <p><b>Study Two:</b> Self-Assessment survey containing demographics, manifestations of stress, and coping assessments</p>	<p><b>Study One:</b> The mean overall level of stress was reported to be 7.2 Male students tended to have a lower perception of stress than female students (7.1 vs 7.6, <math>t = 9.47</math>, <math>P &lt; .05</math>). <b>Study Two:</b> members reported an average stress level of 4.7, with the students reporting their stress as 7.2.</p>	<p><b>Study One:</b> <b>Methodological flaws:</b> Convenience Sampling <b>Inconsistency:</b> None <b>Indirectness:</b> Not all participants took the 2008 wellness survey <b>Imprecision:</b> perception of stress is highly subjective <b>Publication bias:</b> None</p> <p><b>Study Two:</b> <b>Methodological flaws:</b> Convenience Sampling <b>Inconsistency:</b> None <b>Indirectness:</b> None <b>Imprecision:</b> Small sample size <b>Publication bias:</b> None</p>
Design				Implications	
<p><b>Study one:</b> qualitative, cross-sectional (descriptive study)</p> <p><b>Study Two:</b> Qualitative descriptive study</p>				<p><b>Study One:</b> Perceived stress can be decreased using stress management and wellness <b>Study Two:</b> Both CRNA and SRNA are stressed but remain still are 93.6% extremely satisfied with their job choice but determined wellness is important.</p>	

References					
<p>Griffin, A., Yancey, V., &amp; Dudley, M. (2017). Wellness and thriving in a student registered nurse anesthetist population. <i>AANA Journal</i>, 85(5), 325-330. Retrieved from <a href="https://resource.ahu.edu/login?url=https://search-proquest-com.resource.ahu.edu/docview/1949079102?accountid=35793">https://resource.ahu.edu/login?url=https://search-proquest-com.resource.ahu.edu/docview/1949079102?accountid=35793</a></p> <p>Phillips, J. K. (2010). Exploring student nurse anesthetist stressors and coping using grounded theory methodology. <i>AANA Journal</i>, 78(6), 474-482. <a href="https://search-proquest-com.resource.ahu.edu/docview/848856829/fulltextPDF/3CB352083BF4497APQ/1?accountid=35793">https://search-proquest-com.resource.ahu.edu/docview/848856829/fulltextPDF/3CB352083BF4497APQ/1?accountid=35793</a></p>					
Purpose	Variables	Setting/Subjects	Measurement and Instruments	Results	Evidence Quality
<p><b>Study One:</b> to explore the relationship between student registered nurse anesthetists perceived wellness and students' thriving throughout their academic program.</p> <p><b>Study Two:</b> examine the challenges that recent graduates of nurse anesthesia programs coped with during their anesthesia curriculum</p>	<p><b>Study One:</b> Primary Outcome: Wellness, Self-efficacy, Academic Achievement, Clinical Competence, Patients' Perceptions of Students' Relational Skills</p> <p><b>Study Two:</b> Primary Outcome: Explored SRNA stress and coping in 3 phases</p>	<p><b>Study One:</b> <b>Setting:</b> Midwestern state university. <b>Subjects:</b> 3 separate cohorts of students pursuing a master's degree in a nurse anesthesia program (n-75)</p> <p><b>Study Two:</b> 12 recent nurse anesthesia program graduates, from 5 different nurse anesthesia programs, who have been out of school for less than 2 years</p>	<p><b>Study One:</b> Salutogenic Wellness Promotion Scale measures perceived wellness and Perceived Self-Efficacy Scale which measures self-efficacy at different intervals throughout their course of study in the anesthesia program</p> <p><b>Study Two:</b> Grounded theory methodology and Interviews</p>	<p><b>Study One:</b> There was a significant correlation between SWPS and PSE at time 1 (<math>r = 0.34</math>, <math>P &lt; .05</math>), time 2 (<math>r = 0.32</math>, <math>P &lt; .05</math>), and time 3 (<math>r = 0.62</math>, <math>P &lt; .01</math>)</p> <p><b>Study Two:</b> Participants identified perceive stressors which led to a data driven developmental framework for their experience</p>	<p><b>Study One:</b> <b>Methodological flaws:</b> Small sample size, however, it was a pilot <b>Inconsistency:</b> None <b>Indirectness:</b> None <b>Imprecision:</b> no cause-effect conclusions can be made regarding the observed relationship between wellness and perceived self-efficacy. <b>Publication bias:</b> None</p> <p><b>Study Two:</b> <b>Methodological flaws:</b> Convenience Sampling <b>Inconsistency:</b> none <b>Indirectness:</b> none <b>Imprecision:</b> Small sample size <b>Publication bias:</b> None</p>
Design					
<p><b>Study one:</b> Correlation study</p> <p><b>Study Two:</b> Qualitative study</p>					
				<p><b>Implications</b></p> <p><b>Study One:</b> The higher the self-efficacy scores the higher the chances of success</p> <p><b>Study Two:</b> As students progresses through their program their ability to cope progresses as well</p>	

## Appendix B

### Leave Behind

ADVENTHEALTH UNIVERSITY DEPARTMENT OF NURSE ANESTHESIA

APRIL 6, 2020

# Videoconferencing Group Intervention and Self-Efficacy in Student Nurse Anesthetists

Roberto Rodriguez, RN, BSN, CCRN & Joseph Plaza, RN, BSN, CCRN



## Introduction of the Study

The 2022 AHU DNAP cohort is invited to take part in this research study because we feel that your experiences and insights as a student nurse anesthetist can contribute to the well-being of future student nurse anesthetists. We are conducting a survey and implementing three group sessions to learn more about self-efficacy during the first clinical trimester.

## Participation

- 10-item questionnaire via SurveyMonkey
- Participate in zero to three 45-60 minute videoconferencing sessions
- 10-item questionnaire via SurveyMonkey

The group sessions will be facilitated by the university counselor and/or chaplains. Topics addressed will be Choice, Interpersonal Relationships, and Outlook from CREATION Health. Consent forms will be required prior to any surveys and videoconference sessions. Everything is to remain confidential.

## When Will This Take Place?

The three videoconferencing sessions will be on Friday afternoons during the 2020 Summer Trimester via BlueJeans, an application currently used by AHU. BlueJeans is user friendly and available on PC, Mac and smartphone devices.



### Potential Benefits

May benefit from gaining a new strategy for wellness and from the social support during the interventions. The insight from this study may help guide nurse anesthesia programs in addressing self-efficacy.



### Compensation

Amazon gift cards will be raffled to participants: **\$50** for **each** group intervention & **\$30** for completion of **both** pre and post questionnaires.

1

### PARTICIPATION

Your participation is **voluntary**. You may go to one, all or you may choose not to participate.

2

### CONFIDENTIALITY

Consent forms will be collected. Discussions are not recorded and surveys kept private. AHU Faculty will be not involved.

3

### SHARING OF RESULTS

All information provided is de-identified & used solely for the purpose of this study. All data will be destroyed within 5 years.

Email: [Roberto.Rodriguez@my.ahu.edu](mailto:Roberto.Rodriguez@my.ahu.edu)

[Joseph.Plaza@my.ahu.edu](mailto:Joseph.Plaza@my.ahu.edu)



## Appendix C

## Informed Consent Form &amp; Compensation for Participants

Study Title: Videoconferencing Group Intervention and Self-Efficacy in Student Nurse Anesthetists  
PI: Steven Fowler, DNP, CRNA AHU IRB Consent Document Guidelines  
Project Tracking Number: NAP39419

**AdventHealth University (AHU)**  
**Consent Document to**  
**Participate in a Human Research Study**

**Study Title: Videoconferencing Group Intervention and Self-Efficacy in Student Nurse Anesthetists**

**Principal Investigator (PI):** Steven Fowler, DNP, CRNA

**Co-investigator(s) (Co-Is):** Roberto Rodriguez, BSN, RN, CCRN and Joseph Plaza, BSN, RN, CCRN

**Introduction of the Study**

We are Roberto Rodriguez, BSN, RN, CCRN and Joseph Plaza, BSN RN, CCRN, and are asking you to participate in this research study entitled “Videoconferencing Group Intervention and Self-Efficacy in Student Nurse Anesthetists at AdventHealth University Department of Nurse Anesthesia.” You are invited to take part in this research study because we feel that your experiences and insights as a student nurse anesthetist can contribute to the well-being of future student nurse anesthetists. As part of this research, we are implementing three group interventions and conducting a survey to learn more about self-efficacy during the first clinical trimester.

We plan to enroll approximately 30 participants in this study. Your participation in this study is completely voluntary. You are not required to participate.

**Purpose of the Study**

The purpose of this research study is to explore the relationship between group intervention focused on wellness and self-efficacy during the clinical portion of AdventHealth University’s Doctor of Nurse Anesthesia Practice (DNAP). SRNAs are under much stress that increases with the integration of clinicals. An anticipated outcome for group intervention focused on wellness is improved self-efficacy.

**Procedures**

You will be asked to participate in this research in the following ways. Your initial participation will take approximately 5 minutes to complete a 10-item questionnaire. After, there will be three group interventions, and each will be 45-60 minutes. You may participate in any number of

Study Title: Videoconferencing Group Intervention and Self-Efficacy in Student Nurse Anesthetists  
PI: Steven Fowler, DNP, CRNA  
Project Tracking Number: NAP39419

AHU IRB Consent Document Guidelines

group interventions. After the third group intervention, you will be asked to complete the same 10-item questionnaire.

The group interventions will have 8-12 SRNAs facilitated by a professional. The facilitator will address a topic from CREATION Health, Choice, Interpersonal Relationships, and Outlook, then guide the group in a discussion. All discussion is to remain confidential.

### **Possible Risks and Discomforts Associates with the Study**

The risks associated with participation in this study are minimum. You are being asked to share personal thoughts with peer SRNAs and a facilitator not associated with the program.

In addition, although the risks of a breach of confidentiality or privacy are low, we cannot guarantee that your privacy or confidentiality will not be breached.

### **Potential Benefits**

You may benefit from gaining a new strategy for wellness and from the social support during the interventions. In addition, there may be benefits to future SRNAs. The insight from this study may help guide nurse anesthesia programs in addressing self-efficacy.

### **Confidentiality (required)**

The research team will work to protect your confidential information. Prior to the group interventions, all will be asked to sign a written consent form with a confidentiality statement. Discussions will not be recorded. The survey responses you share will be kept private and any information stored on computers are password protected. All data will be retained for 5 years on a password protected cloud drive on the university's internal server, then destroyed. We will take steps to protect your privacy, however we are unable to guarantee or promise that your privacy will not be breached. Governmental agencies and the IRB may request access to study related data. We will work to ensure that your privacy is protected.

### **Sharing the Results**

The knowledge that we obtain from your participation will be shared via poster board in the AdventHealth University conference room. No information that you shared with us will be presented with your name or any other identifying information. All information when presented is de-identified without any links to you and is presented as group data.

Study Title: Videoconferencing Group Intervention and Self-Efficacy in Student Nurse Anesthetists  
PI: Steven Fowler, DNP, CRNA AHU IRB Consent Document Guidelines  
Project Tracking Number: NAP39419

### **Voluntary Participation**

Your participation in this study is voluntary. You may choose to not to participate. The decision to participate or not participate in this research study is completely up to you. If you choose not to participate, your refusal to participate in this research study will involve no penalty or loss of benefits to you. If you choose to participate, you can change your mind later and withdraw your consent and discontinue participation from this study at any time. If you choose to withdraw, inform the PI of your wishes.

### **Right to Refuse or Withdrawal from the study**

You do not have to participate in this research study and choosing not to participate in this study will not involve any penalty or loss of benefit to you. The decision to participate or not participate in this research study is completely up to you. If you choose to participate, you can change your mind later and withdraw your consent and discontinue participation from this study at any time. If you chose to withdraw from the study, inform the PI of your wishes.

### **Compensation**

Amazon gift cards will be raffled to participants: \$50 for each of the three group interventions and \$30 for completion of both questionnaires.

### **Contact Information (required)**

If you have questions, concerns, or complaints regarding this study you may contact the Principal Investigator at (407) 303-9331. You may also email him at: [Steven.Fowler@ahu.edu](mailto:Steven.Fowler@ahu.edu). You may also contact AHU research office at (407) 407-609-1388 or [AHU.Research.Office@ahu.edu](mailto:AHU.Research.Office@ahu.edu) or the IRB Office at (407) 303-5619.

### **Other Information**

We thank you for your participation in this research study. The information that we gather during this research will not be used or distributed to any other researcher for any other research purposes not clearly outlined in this consent form.

**This research has been reviewed and approved by AdventHealth University Institutional Review Board, which is tasked to protect research participants from harm. If you want to learn more about the Institutional Review Board and its role in protecting research participants feel free to contact AdventHealth University IRB at (407) 303-5619.**

Study Title: Videoconferencing Group Intervention and Self-Efficacy in Student Nurse Anesthetists  
PI: Steven Fowler, DNP, CRNA AHU IRB Consent Document Guidelines  
Project Tracking Number: NAP39419

**Participant's Understanding (strongly recommended)**

- I have been invited to participate in research about group intervention focused on wellness and self-efficacy in student nurse anesthetists.
- I understand that my participation is voluntary.
- I understand that all data collected will be limited to the use disclosed above.
- I understand that I will not be identified by name in any presentation or publication.
- I am aware that all my information will be kept confidential and secured by the researcher.
- I understand that I may withdraw from the study at any time.

I have read the forgoing information and it has been explained to my satisfaction. I have had the opportunity to ask questions. I consent voluntary to be a participant in this study.

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**Printed Name of Participant**

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**Signature of Participant (required)**

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**Date Day / Month/ Year**

---

**Name of Person Obtaining Consent**

---

**Signature of Person Obtaining Consent (required)**

---

**Date Day / Month/ Year**

## Appendix D

## General Self-Efficacy Scale

**General Self-Efficacy Scale (GSE)**

	Not at all true	Hardly true	Moderately true	Exactly true
1. I can always manage to solve difficult problems if I try hard enough	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. If someone opposes me, I can find the means and ways to get what I want.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. It is easy for me to stick to my aims and accomplish my goals.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. I am confident that I could deal efficiently with unexpected events.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Thanks to my resourcefulness, I know how to handle unforeseen situations.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. I can solve most problems if I invest the necessary effort.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. I can remain calm when facing difficulties because I can rely on my coping abilities.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. When I am confronted with a problem, I can usually find several solutions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. If I am in trouble, I can usually think of a solution	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10. I can usually handle whatever comes my way.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## Appendix E

## Budget: Itemization of Costs

<b>Item #</b>	<b>Description</b>	<b>Source</b>	<b>Quantity</b>	<b>Total Cost</b>	<b>Amount Requested</b>	<b>Website</b>
1.	Online Survey Forum	Survey Monkey Advantage Plan	1 annual subscription	\$384 annually	\$ 384	<a href="https://www.surveymonkey.com/pricing/individual/?e=edu_faq&amp;ut_source=pricing-summary%20teams-summary&amp;ut_source3=cta_top&amp;ut_source2=rebrand_product">https://www.surveymonkey.com/pricing/individual/?e=edu_faq&amp;ut_source=pricing-summary%20teams-summary&amp;ut_source3=cta_top&amp;ut_source2=rebrand_product</a>
2.	Gift Cards	Amazon	4	\$180.00	\$180	<a href="https://www.amazon.com">https://www.amazon.com</a>

Total Cost: \$564

## Appendix F

## Timeline

The project was introduced to the students in the 2022 cohort during their third trimester. The pre-GSE was distributed via SurveyMonkey at the beginning of their fourth trimester and they were given one week to complete it. Group interventions were at the end of the 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> weeks of their fourth trimester. The post-GSE was distributed via SurveyMonkey immediately after the last group intervention and students had 14 days to complete it.

Leave Behind emailed to students: April 6, 2020

Pre-GSE distributed: May 4, 2020

Group Session 1: June 26, 2020

Group Session 2: July 10, 2020

Group Session 3: July 24, 2020

Post-GSE distributed July 24, 2020

Data Analysis conducted by AHU Statistician: August 9, 2020

Dissemination: March 2021, locally to the AHU community as an asynchronous Canvas course

## Appendix G

## Outline of Group Session 1

**Check-in:**

Welcome to this group session and thank you for your participation. Today we will be discussing the CREATION Health principle of **Choice**. Let us take a moment to go around and introduce ourselves. \*\*Reminder this session is confidential. Please remember to respect the privacy of others after we have concluded this session. Thank you\*\*

**Bridge:**

Most of the time we do not give much thought to small choices. It is tempting to brush them off as if they don't really matter. But small choices can lead to bad outcomes. So, let's get started.

**Listen & Learn:**

Every day, often numerous times a day, you exercise the power of choice. This sacred gift was given to us at Creation. We want to use it wisely. It's one thing to have freedom of choice; it's another to know what to do with that freedom. This part of our group is designed to help you choose wisely. What is meant by the word "choice"? In the broadest sense, it means the option or ability to evaluate various courses of action and to select among them. Choice is the ability to exercise the power of our will. Everything we do is the result of making a choice. We often do things unconsciously, but we cannot avoid making choices. Even the choice to do nothing is, still, a *choice*.

Choice is hardwired right into our brains. The frontal lobe gives us the ability to choose. It makes between 33 and 38% of the brain in humans. The frontal lobe is where our judgement, reasoning, social norms, and long-term planning take place, all of which contribute to making healthy, life-giving choices. It is important that our decisions remain consistent with our will, our beliefs, and our goals. The gift of choice comes with responsibility. We must exercise wisdom in our choices because they will ultimately determine the course of our lives. We have often heard of the *power* of choice. But there really are *powers* of choice, powers to help us make the right decisions that can impact every aspect of our lives.

As we seek to make right decisions, it's important as much as possible, not to let circumstances control all those decisions. Choices, no matter how small they may seem, can positively impact our lives and the lives of those around us. More importantly, small choices accumulated over the years will result in big differences. *Choice* is the first step toward improving your wellbeing. Before we can achieve positive changes in any area of our lives, we must choose to do so. Conscious decision making is key to experiencing the positive impact of good choices.

**Questions:** Consider where you are in the nurse anesthesia program as you answer the following questions.

1. What benefits have you received in life because other people have made good choices?
2. Why is it that some people have a hard time making good choices?
3. What are some of the better choices you have made in your life?
4. What are some ways to you can come up with to make better choices?
5. What role do you think God plays in our choices?

**Wrap Up:**

As you go about your week, think of a situation/dilemma you faced recently in which you had to make a choice but felt you had no choice or limited ones. Write down at least three different possible courses of action.



## Appendix H

## Outline of Group Session 2

**Check-in:**

Welcome to this group session and thank you for your participation. Today we will be discussing the CREATION Health principle of **Interpersonal Relationships**. Let us take a moment to go around and introduce ourselves. \*\*Reminder this session is confidential. Please remember to respect the privacy of others after we have concluded this session. Thank you\*\*

**Bridge:**

People are becoming more and more isolated and it is taking a toll on our health. The purpose of today is to become inspired and encouraged to place a high value on people and meaningful friendships. So, let's get started.

**Listen & Learn:**

What do we mean by “social connection” or social connectedness”? In the broadest sense, it means interacting with other people, such as friends and relatives. These connections will not be the same in every respect for any two people, although ideally these connections should generate a similar sense of openness, generosity, and good will. Although they take work, good relationships are one of our greatest blessings.

Is there anyone who really cares for you, or feels close to you, or loves you, or wants to help you? Is there someone you can confide in/ if so, then according to some studies, you may have three to five times lower risk of premature death and disease from all causes than those who don't have these kinds of relationships.

Perhaps the best-known example of the link between social connectedness and health has been seen in Dr. Dean Ornish's interventions for reversing heart disease. When most people think of this program, they tend to think of low-fat diet, exercise, and meditation. But if you ask Dr. Ornish about the most important part of his program, his answer might surprise you, because he identifies it as interpersonal relationships.

**Questions:** Consider where you are in the nurse anesthesia program as you answer the following questions.

1. Who makes you smile when you think of them? Is this because they believe in you?
2. If we were to make a list of the characteristics that make a friend a good friend, what would you add to the list?
3. How have you benefited from healthy relationships throughout your life?
4. Can you identify a time when you were particularly lonely?
5. For those of you who have gone through lonely times, would you be willing to help someone by describing what helped you break out of it?

**Wrap Up:**

As you go about your week, think about this Social Circles Exercise. In the innermost circle write the names of people who are your most important and direct supporters. In the next circle write the names of friends and relatives who are not as significant but who still provide support. In the third circle write the names of people you have a relationship with, don't really get support from, but feel you could if you really needed it. Describe how this impacted you.

## Appendix I

### Outline of Group Session 3

#### **Check-in:**

Welcome to this group session and thank you for your participation. Today we will be discussing the CREATION Health principle of **Outlook**. Let us take a moment to go around and introduce ourselves. \*\*Reminder this session is confidential. Please remember to respect the privacy of others after we have concluded this session. Thank you\*\*

#### **Bridge:**

Rest is when re-CREATION happens in our bodies, minds, and souls. Let's get started!

#### **Listen & Learn:**

What is Outlook? Outlook refers to how we approach the world and our lives. In other words, it is our general attitude. Outlook affects how we perceive the world, what we think of ourselves, of the people around us, our job, our home, our friends – everything. Our outlook impacts everything we think about and do. Some people tend to be optimistic, a definite asset; others tend to be pessimistic, which can lead to difficulties.

In *Learned Optimism*, Dr. Martin Seligman reported on an attributional style questionnaire he developed that ranks individuals on an optimism-pessimism scale. He did a longitudinal study on schoolchildren. What this study found was that those who scored the highest for optimism stayed non-depressed or, if they did get depressed, they recovered rapidly. In contrast, the pessimists were most likely to get and stay depressed.

Dr. Seligman summarizes his many studies on optimism and pessimism by stating, "Over and above their talent-test scores, we repeatedly find that pessimists drop below their potential and optimists exceed it. I have come to think that the notion of potential, without the notion of optimism, has very little meaning.

Overall, optimists tend to have feelings of control over their lives. Seligman states in his book that "becoming an optimist consists not of learning to be more selfish and self-assertive, or presenting yourself to others in overbearing ways, but simply of learning a set of skills about how to talk to yourself when you suffer a personal defeat." As you learn to be more optimistic, you will be learning to speak to yourself about your setbacks from a more encouraging viewpoint.

**Questions:** Consider where you are in the nurse anesthesia program as you answer the following questions.

1. Name something you are looking forward to.
2. While growing up, what kinds of "outlooks" were modeled in your home?
3. In general, what would you say is your automatic response when things do not go as you wish?
4. How does one go about changing their outlook from pessimistic to optimistic?
5. What are three blessings God has given you this week?

#### **Wrap Up:**

As you go about your week, every evening for the next week, write down one unique thing that went well for you then write down why you think this good event happened.