Department of Nursing, Fort Hays State University NURS 891: Implementation and Evaluation of EBRP Dr. Christine Hober

Introduction & Purpose

As a nurse educator, nursing students experiencing burnout is of great concern. Nursing school is taxing, stressful and a significant amount of work. There are challenging issues related to nursing studies including significant academic workload, clinical training, competitive atmosphere between peers and preparation for NCLEX exam that can lead to feelings of burnout (Arian et al., 2023; Ghods et al., 2022; Hwang & Kim, 2022). Statistically Arian et al. (2023), found that the overall prevalence of burnout among nursing students is 46%. This study intends to discover whether the implementation of daily low to moderate exercise influences feelings of stress and burnout in nursing students. Nevins et al. (2019) discusses how self-care practices including exercise and hydration can have effects on the overall physical and emotional health of nursing students.

This evidence-based practice project focuses on the nursing student and their perception of stress and burnout. The project begins with assessing these perceptions through a survey, utilizes an exercise intervention throughout the duration of the study, and then assesses the same variables in the post-survey. This study will test the influence that exercise has on the feelings of stress, burnout, and well-being of the nursing student.

Problem

Burnout as defined by Arian et al. (2023) is a syndrome characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment. This syndrome is generally accompanied by a range of emotional responses and experiences including, but not limited to, severe fatigue, emotional detachment, irritability, increased aggression, difficulty concentrating, sudden lack of interest in formerly enjoyable activities, and new or worsening anxiety or depression (Ghods et al., 2022; How To Prevent Burnout in Nursing School, 2023; Vasconcelos et al., 2020).

Hypothesis: Researchers expect to find positive effects of participants in the study, particularly decreased perceived feelings of stress and anxiety, and increased feelings of well-being.

Research Question: In undergraduate BSN nursing students (P) how does physical activity (I) compared to no physical activity (C) affect nursing student burnout (O) over a 2-month period (T)?

Independent Variable: Interventions of physical activity

Dependent Variable: Nursing students' feelings of stress, burnout, and wellbeing

Methodology

IRB: This study was reviewed and approved by the Institutional Review Board at Fort Hays State University.

Setting: WSU Bachelor of Science Nursing Students that are taking professional nursing courses in the spring 2024 semester.

Sample: 10 nursing students, most in age range of 21-29, never married and most only had some college but no degree

Interventions: Exercise intervention to include participant selected 20-30 minutes of low to moderate exercise daily.

Tools: The surveys utilized in this study were a combination of Burnout Assessment Tool (BAT) Questions, QPAR questions, and several demographic questions. Each of these scales were utilized to assist in finding correlation between the

interventions and the feelings of stress, burnout, anxiety, and overall student wellbeing.

Analysis: Data analyzed using Excel. Normality test of each continuous variable performed. Internal reliability of each scale calculated using Cronbach's alpha. Tabulation of the surveys will be completed using repeated measures ANOVA, paired t-test, and correlation. This shows the correlation or lack thereof between the scores. The repeated measures ANOVA is a test to detect any overall differences between related means. It is utilized to show correlation between feelings of burnout, stress, and fatigue pre and post intervention. The significance level is set at p < 0.05.

Review of Literature

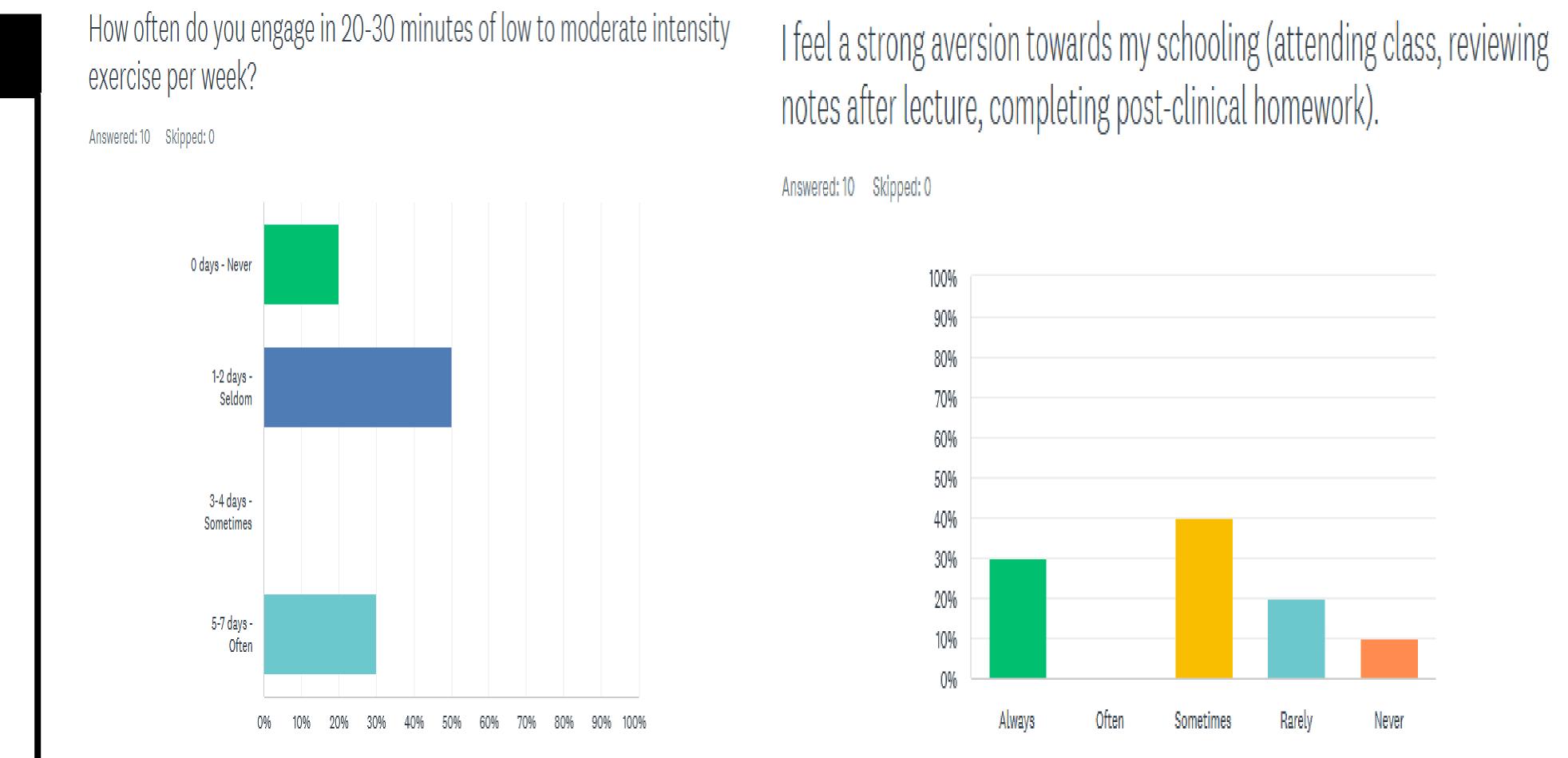
The main focus of this review will be the common factors leading to nursing student burnout, the relationship between burnout and academic success, interventions for burnout prevention and implications for nurse educators. Articles were chosen based on their ability to address the question and their timeliness. Articles were chosen from various databases and journals including Journal of Nursing Education and Nurse Education Today.

The reason each of these studies took place is because of the prevalence of burnout among nursing students. A major theme throughout is the stress that nursing students experience. Nursing students juggle a rigorous academic schedule on top of clinical practicum rotations, simulations, and preparation for the NCLEX exam. Burnout can lead to harmful consequences including negative effects on quality of nursing care the student provides, academic performance and withdrawal from courses (Ghods et al., 2022). It's important that the students themselves are aware of the feelings of burnout and recognize these stressors and take part in self-care practices including exercise. This article also found five suggestions to be considered to reduce nursing student burnout. One of those included engaging in physical activity and healthy eating which can improve nursing student burnout and stress. Understanding the causes of stress in nursing students is important for nurse educators. Providing support and opportunity to vent or time for self-care is an important strategy to reduce stress.

There are several factors and variables that can contribute or affect academic burnout. Personal factors that may contribute to burnout that were presented by Hwang & Kim (2022) include health status, interpersonal relationships, anxiety, depression, psychological stress, self-efficacy, and environmental factors. Studies by Hwang & Kim (2022) also found that nursing students have a higher level of anxiety, depression and stress compared to other academic degrees. In relation to other majors, nursing and medical students experience intense and complex curriculum, and pressure for professional performance (Hwang & Kim, 2022). Nursing students also have a clinical practicum hour requirement to meet throughout the course of their degree. Clinical practicum experiences can cause students to experience stress and this stress can cause dissatisfaction with the clinical practice experience thus affecting academic burnout (Hwang & Kim, 2022).

According to research by Hwang & Kim, (2022) academic burnout in nursing students leads to a decrease in confidence and can cause psychological withdrawal and frustrations in their studies. Not only can burnout affect a student during their academic studies but is a significant predictor of psychological well-being (Hwang & Kim, 2022). Academic burnout can interfere with job preparation, transferring into the professional role as well as socialization (Hwang & Kim, 2022). Due to all these relationships, providing strategies as an educator to reduce burnout is essential. Academic burnout can lead to increased absences, less motivation for educational activities, and greater likelihood of withdrawal from the nursing program (Ghods et al., 2022).

Each study provided information regarding interventions that may help with minimizing burnout. Research by Vasconcelos et al., (2020) found that there is a lack of preventive programs in national institutions to detect burnout as well as reducing the incidence and prevalence of burnout syndrome in academics. Wellness and psychological well-being of a nursing student have been found to be essential to developing resilience in our nursing workforce (Martin et al., 2022). Research by Arian et al. (2023) found that interventions including "psychological education and counseling, strengthening organization, time management, encouraging physical activity and healthy eating" are some ways to reduce burnout.





Outcomes & Recommendation

The initial Burnout Assessment Tool (BAT) pretest yielded an average score of 72.8 for the ten participants. Notably, the highest BAT scores were observed among students that were in the age range of 21-29. Students that had an Associate or Bachelor degree had an average BAT score of 76. For the 2 post survey results that were received and matched to presurveys, it was found that there BAT results decreased and they increased their exercise between the pre and post survey results.

Unfortunately, due to lack survey responses there was minimal correlation between pre and post survey results.

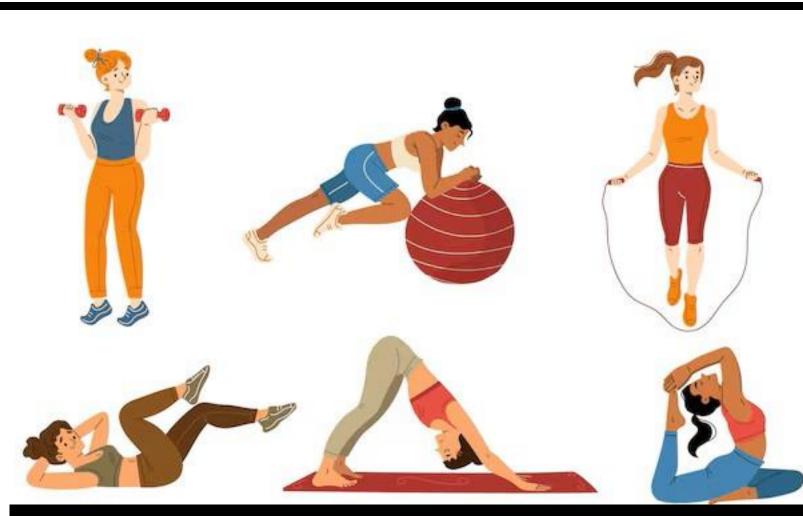
Recommendations:

• Extend the length of interventional period • Provide incentive to increase participation in future studies

Implications for changes: Finding interventions that improve nursing student academic performance, that are easily implemented with minimal cost to the students could help across the board even into post-graduation in the medical work field

Limitations: Small study group and short time frame. Level of student participation had a huge impact on study results.

Conclusion: Further studies need to be done to determine appropriate interventions. Those who increased their exercise intervention during the study period had a decrease in BAT scores.



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Conclusion

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