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Stress Management and Resilience among Students Enrolled in the Entry Level Master of Science in Nursing (ELMSN) Program

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Abstract

Objectives: The aim of the study was to evaluate the effect of mindfulness exercises on stress management and resilience among ELMSN students. **Methods:** The study was a quasi-experimental design that used a paired samples t-test to compare pre-test and post-test of students' scores on both GAD-7 anxiety screening tool and short version of Grit-scale. Statistical tests were conducted with significance set at $p < 0.05$ (two-sided). All analyses were performed using IBM SPSS Statistics, version 31.0 to compare pre-/post-test scores, determine differences, and statistical significance of interventions among the cohort. And a priori power analysis was conducted to determine the required sample size for a paired samples t-test. With an alpha level of 0.05 and a medium effect size (Cohen's $d = 0.50$), a total sample size of $N = 34$ was determined to be sufficient to achieve a power of 0.80. **Results:** A convenience sample of 40 students (35 females and 5 males) participated in the study. Students had more anxiety before mindfulness exercises ($M = 7.00$, $SD = 5.5$) compared to after the mindfulness exercises ($M = 6.2$, $SD = 3.4$), $t(39) = 1.41$, $p = 0.17$. The effect size was small, $d = 0.22$. However, the difference in the students' anxiety levels after the mindfulness exercises was not statistically significant, with a p-value of 0.17. On the resilience, students were less resilient before mindfulness exercises ($M = 3.58$, $SD = 0.70$) compared to after the mindfulness exercises ($M = 3.96$, $SD = 0.50$), $t(39) = -2.45$, $p = 0.02$. The effect size was medium, $d = -0.39$, but statistically significant with a p-value of 0.02. **Conclusions:** Inadequate stress management among students leads to anxiety that often serves as a barrier to academic success. Students were able to manage their anxiety better with the mindfulness exercises, and it was evident that students were more resilient after the exposure to several mindfulness exercises. Introduction of mindfulness exercises can assist students to be more confident and cope effectively with learning

challenges throughout the undergraduate program. The adoption of mindfulness exercises can increase retention, academic success, and graduation rates among students. Practicing mindfulness exercises at home during leisure time by students should be further investigated and quantified. The adoption of mindfulness exercises can increase retention, academic success, and graduation rates among students.

Keywords

Mindfulness, Resilience, Anxiety, Grit

1. Introduction/Background

The pursuit of academic excellence can be very daunting for pre-licensure nursing students. Nursing students experience heightened stress levels due to the academic and clinical demands placed upon them throughout their education [1]. The entry-level Master of Science in nursing program is a fast-paced, accelerated program that must be completed within 24 months. This places a lot of stress on the students to succeed academically in both didactic and clinical dimensions. Stress can be defined as a state that arises when the internal or external demands on an individual exceed the individual's ability to cope or adapt to a situation [2]. University students experience high anxiety and stress across programs and some of this stress relates to the extrinsic focus of many students, who see their education as it relates to prestige and earning power, rather than learning [3]. Therefore, addressing the problem of stress at an undergraduate level may have multiple benefits [2]. The demands of nursing can be met with resilience, a positive response that can be learned [3]. Stress reduction, cognitive therapy, and relapse prevention programs are based on mindfulness [4]. Mindfulness is an experiential process in which attention is directed purposefully and consciously to what is happening in the body and mind at that moment, and the content that emerges because of these observations is accepted without judgment, analysis, reaction, curiosity, understanding, and compassion [4]. Stress and anxiety are common problems among nursing students, affecting their mental health and academic performance [5]. In a study, it was found that the undergraduate nursing students had a high level of perceived stress and lower levels of psychological well-being [6]. Stress and anxiety levels have been reported to be significantly higher in nursing students than in students in other disciplines [5]. Anxiety reduction and ability to focus on what matters most can enhance learning outcomes among students [7]. Balancing academic work and clinical work is stressful to many nursing students [8]. Individuals with a high level of mindfulness display a greater self-perception of well-being, are much better at coping with stress and are successful in their relations with others [9]. Mindfulness practices include breathwork, body scan, and awareness of bodily sensations, emotions, and thoughts [2].

Resilient nurses, who work in stressful environments, report high levels of psy-

chological well-being and low levels of burnout [10]. Nursing is a highly demanding profession with daily occupational, organizational, physical, and psychological demands, making nurses more vulnerable than other professional groups to low resilience [11]. Low levels of resilience are associated with poor stress-management skills [2]. Resilience is the ability of an individual to prepare for or respond to perceived adversities. Stress reduction and resilience can help students respond to and cope with the demands of nursing school, and part of developing resilience is learning positive ways to deal with stress [3]. Many nursing programs, due to challenging course work, clinical work, and negative student stress reactions, report high levels of attrition [11]. Resilience enables nurses to adapt positively to stressful working conditions and the associated emotional distress [11]. Resilience drives one's attention to strengths and opportunities, rather than weaknesses and vulnerability, through reframing one's perspectives, and has been underlined as a potential factor to help nurses cope with professional difficulties without having an impact on one's mental well-being [8].

Inverse correlation between stress and mindfulness has been demonstrated in several studies [12]. Mindfulness has been theoretically and empirically associated with psychological health, and indeed, there is a wealth of evidence showing the positive effects of mindfulness-based interventions, such as mindfulness-based stress reduction [13]. The Healthy Minds Network has made a case for the economic benefits of counseling service in terms of return on investment for institutions providing mental health services and thereby helping sustain student retention [7]. According to [12], there has been increasing use of mindfulness in occupational contexts since the late 1990s, for not only staff who might be suffering with stress and mental health issues but workers in general. The most prominent operationalization of mindfulness as a mental state/quality is the awareness that arises through paying attention on purpose, in the present moment, and nonjudgmentally to the unfolding of experience moment by moment [12]. Therefore, in view of several observations on enrolled Entry Level Master of Science in Nursing (ELMSN) students, we decided to evaluate the effect of Mindfulness exercises on stress management and resilience on a cohort using quasi-experimental design.

2. Purpose

The aim of the study was to evaluate the effect of mindfulness exercises on stress management and resilience among ELMSN students.

Research Question (*H1*): Mindfulness exercises have effect on stress management among ELMSN students.

Null hypothesis (*H01*): Mindfulness exercises do not have effect on stress management among ELMSN students.

Research Question (*H2*): Mindfulness exercises have effect on resilience among ELMSN students.

Null hypothesis (*H02*): Mindfulness exercises do not have effect on resilience among ELMSN students.

3. Method

All Entry Level Master of Science in Nursing (ELMSN) students in a cohort were purposely selected. The study aim was explained to all students and consent obtained from those willing to participate per the ethics committee. GAD-7 anxiety screening tool and gritty tool were made available to all students via Qualtrics. GAD-7 Anxiety tool is 7-item questionnaires that can be self-administered to determine minimal, mild, moderate, and severe anxiety levels with individuals. The scoring is calculated by assigning rated symptoms on a scale from 0 (Not at all) to 3 (Nearly every day). GAD-7 total score for the seven items ranges from 0 to 21. 0 - 4: minimal anxiety, 5 - 9: mild anxiety, 10 - 14: moderate anxiety, 15 - 21: severe anxiety. Anxiety control and stress management are deeply interconnected, creating a cycle where managing one significantly improves the other. Anxiety is often a reaction to stress, triggered when a person feels they cannot handle a challenge. Self-report questionnaires allow for both professionals and nonprofessionals to identify a probable disorder and assess the severity of symptoms [14]. Prior psychometric research has shown the GAD-7 to have excellent internal consistency (α = 0.92), good test-retest reliability (r = 0.83), construct validity, and good sensitivity/specificity when detecting generalized anxiety disorders [14]. The interpretation of rating indicates stress management among individuals.

In a study, the construct validity of GAD-7 tested with exploratory and confirmatory factor analysis found a coefficient of 0.915, and the convergent validity Pearson correlation coefficients calculated to examine convergent validity of the GAD-7 with other measures (PHQ-9 and PHQ-ADS) indicated highly and positive correlation of between 0.751 - 0.934 that were statistically significant ($p < 0.01$) [15] [16]. The GAD-7 scale has been shown to highly correlate not only with specific anxiety measures but also with disability measures [17]. Identifying students' mental health disorders can result in earlier intervention and improve their chances of degree completion [14].

The short version of Grit-Scale, consisting of 8-item questionnaires, was used to collect data on students' grit level as either not gritty at all or extremely gritty. Scoring based on:

1) For questions 2, 4, 7 and 8 assign the following points:

5 = Very much like me

4 = Mostly like me

3 = Somewhat like me

2 = Not much like me

1 = Not like me at all

2) For questions 1, 3, 5 and 6 assign the following points:

1 = Very much like me

2 = Mostly like me

3 = Somewhat like me

4 = Not much like me

5 = Not like me at all

All points were added and divided by 8. The maximum score on this scale is 5 (extremely gritty), and the lowest score on this scale is 1 (not at all gritty) [18].

The Consistency of Interest factor, and the whole Grit-S showed adequate internal consistency, αs = 0.70, 0.77, and 0.82 [18]. A confirmatory factor analysis supported the two-factor model of grit based on two subscales of consistency of interest and perseverance of effort (Duckworth and Quinn, 2009) [18]. The pre-test survey was collected in the first trimester. This was followed by weekly 30 minutes of mindfulness exercises and instructions that lasted 12 weeks in each trimester, and the post-survey data was collected in the third trimester. A paired samples t-test was used to compare pre-test and post-test of students' scores on both tools. The study was approved by the University's Institutional Review Board (IRB2024-390).

4. Data Collection and Analysis

Statistical tests were conducted with significance set at $p < 0.05$ (two-sided). All analyses were performed using IBM SPSS Statistics, version 31.0 (IBM, 2025) [19] to compare pre/post test scores, determine mean differences, and statistical significance of interventions among the cohort. And a priori power analysis was conducted to determine the required sample size for a paired samples t-test. With an alpha level of 0.05 and a medium effect size (Cohen's d = 0.50), a total sample size of N = 34 was determined to be sufficient to achieve a power of 0.80 (**Table 1**).

A mindfulness curriculum developed by faculty included 30 minutes of mindfulness exercises and instructions that lasted 12 weeks in each trimester (see **Appendix**). On each encounter, students were given handouts and encouraged to practice numerous exercises such as meditation, mindful seeing, mindful listening, five senses exercise, observer meditation, 3-minute breathing space, my self-care plan, body scan, and 3-step mindfulness exercise. The home practice among students was not tracked. All classes were taught by qualified faculty in collaboration with the University's counsellor, who provided the ZOOM teachings in two weeks of the trimester. All data is stored electronically and encrypted.

Table 1. Power analysis.

Power Analysis Table					
	N[b]	Actual Power[c]	Test Assumptions		
			Power	Effect Size	Sig.
Test for Mean Difference[a]	34	0.808	0.8	0.5	0.05

[a]Two-sided test. [b]Number of pairs. [c]Based on noncentral t-distribution.

5. Results

Demographic Characteristics of Participants

A convenience sample of Entry Level Master of Science in Nursing (ELMSN) Cohort in their first trimester participated in the study. Out of 48 only forty students

(35 females and 5 males) participated in the study. Thirty-five were single, and 5 were married/partnered. The students were of diverse ethnicity that consisted of 14 Asian, 4 African American/black, 12 white/European, and 10 were of Hispanic/Latinx heritage. Eleven of the students were living on/off campus, 10 renting apartment, 18 living with family, and one student had variable accommodation. Thirty-two of the students have no children, two had one child, four had two children, and two had three or more children. The age of students ranged between 18 - 44 years. Thirty-six of the students had undergraduate science degree while 4 were others. Nineteen of the students were first generation in their families to attend college while 21 students were not. 35 students were on financial aid while five were self-paying. Only 14 of the students did not work while others worked various hours per week, ranging from 1 - 35 hours per week. 31 students were actively engaged with campus activities while 9 were not (see Table 2 & Table 3).

Table 2. Demographic characteristics.

Characteristics	Frequency (N)	Total Sample
Marital status	Married/partnership = 5, Single = 35	40
# of children	None = 32, one child = 2, two children = 4, three or more children = 2	40
Ethnicity	Asian = 14, AA/black = 4, White/European = 12, Hispanic/Latinx = 10	40
Age	(18 - 24) = 21, (25 - 34) = 17, (35 - 44) = 2	40
# of children	None = 32, one child = 2, two children = 4, three or more children = 2	40
1st generation to attend college	Yes = 19, No = 21	40
Undergraduate degree	Science = 36, others = 4	40
Financial aid	Yes = 35, No = 5	40
Gender	Female = 35, Male = 5	40
Hours worked per week	No work = 14, 1 - 5 hours = 3, 6 - 10 hours = 7, 11 - 15 hours = 8, 16 - 20 hours = 1, 21 - 35 hours = 7	40
Campus involvement	Yes = 31, No = 9	40
Living accommodation	On/off campus = 11, renting apartment = 10, living with family 18, varies = 1	40

Table 3. Descriptive statistics.

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Marital status	40	1.00	2.00	1.1250	0.33493
# of children	40	1.00	4.00	1.4000	0.87119
Ethnicity	40	1.00	4.00	2.4500	1.21845
Age	40	1.00	3.00	1.5250	0.59861

Continued

1st generation to attend college	40	1.00	2.00	1.5250	0.50574
Undergraduate degree	40	1.00	2.00	1.1000	0.30382
Financial aid	40	1.00	2.00	1.1250	0.33493
Gender	40	1.00	2.00	1.1250	0.33493
Hours of work per week	40	1.00	6.00	3.0000	1.85362
Campus involvement/activities	40	1.00	2.00	1.2250	0.42290
Living accommodation	40	1.00	4.00	2.2250	0.89120
Valid N (listwise)	40				

To test the effect of mindfulness exercises on stress management, a paired-samples t-test was conducted to compare pre-scores on GAD-7 screening tool to the post-scores on the anxiety levels of students. A Shapiro-wilk test indicated that the differences between the conditions were normally distributed, W = 0.97 (40), p = 0.24 based on p-value > 0.05 (see Table 4, Figure 1). Students' anxiety levels decreased based on pre-test mean and standard deviation of (M = 7.00, SD = 5.5) compared to post-test scores of (M = 6.2, SD = 3.4), t(39) = 1.41, p = 0.17 (see Table 5 & Table 6). The effect size was small, d = 0.22 (Table 7). The standard subtraction order for Cohen's d is 6.2 - 7.00 = −0.8, which showed the decrease in anxiety level. However, the difference in the students' anxiety levels after the mindfulness exercises was not statistically significant, with a p-value of 0.17 (see Table 6). Therefore, the *Null* hypothesis that stated mindfulness exercises do not have effect on stress management among ELMSN students was accepted and the research hypothesis that stated mindfulness exercises have effect on stress management among ELMSN students was rejected.

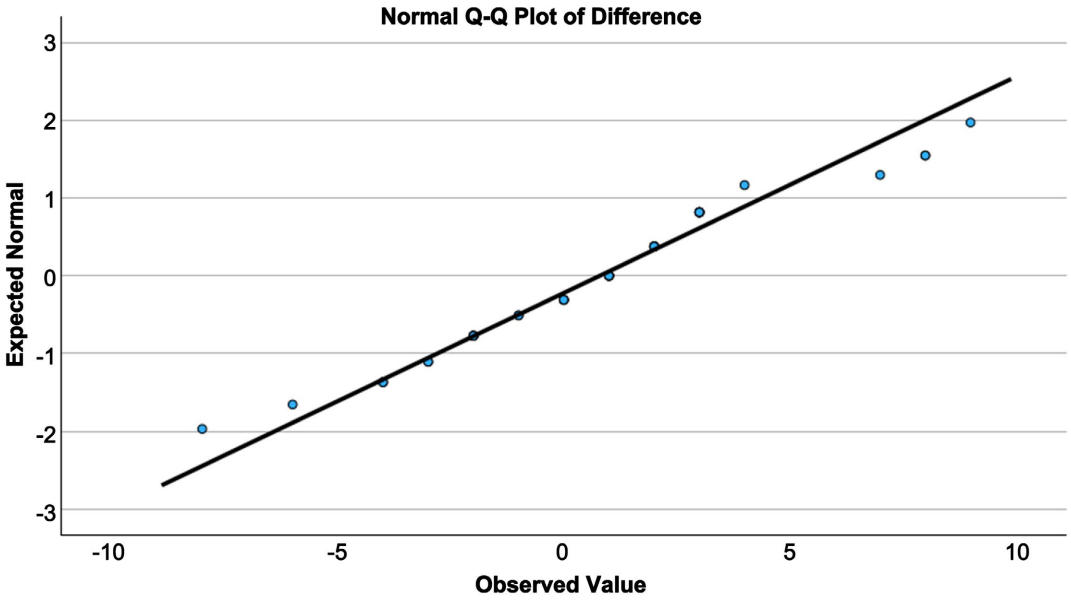

Figure 1. Normal distribution.

Table 4. Test of normality.

Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Difference	0.145	40	0.033	0.965	40	0.239

[a]Lilliefors significance correction.

Table 5. Paired samples statistics.

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	GAD-7 Anxiety scale	7.0000	40	5.50058	0.86972
	GAD-7 Anxiety scale	6.2000	40	3.40588	0.53852

Table 6. Paired samples test.

Paired Samples Test										
		Paired Differences					t	df	Significance	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				One-Sided p	Two-Sided p
					Lower	Upper				
Pair 1	GAD-7 Anxiety scale - GAD-7 Anxiety scale	0.80000	3.59629	0.56862	−0.35015	1.95015	1.407	39	0.084	0.167

Table 7. Paired samples effects sizes.

Paired Samples Effect Sizes						
			Standardizer[a]	Point Estimate	95% Confidence Interval	
					Lower	Upper
Pair 1	GAD-7 Anxiety scale - GAD-7 Anxiety scale	Cohen's d	3.59629	0.222	−0.093	0.535
		Hedges' correction	3.66735	0.218	−0.091	0.524

[a]The denominator used in estimating the effect sizes. Cohen's d uses the sample standard deviation of the mean difference. Hedges' correction uses the sample standard deviation of the mean difference, plus a correction factor.

To evaluate the effect of mindfulness exercises on resilience, a paired-samples t-test was conducted to compare pre-scores on Gritty scale screening tool to the post-scores on the gritty scale. A Shapiro-wilk test indicated that the differences between the conditions were normally distributed, W = 0.981 (40), p = 0.74 an indication of p-value greater than 0.05 confirmed normal distribution of scores (see **Table 8**, and **Figure 2**). Students were less resilient before mindfulness exercises (M = 3.58, SD = 0.70) compared to after the mindfulness exercises (M = 3.96, SD = 0.50), t(39) = −2.45, p = 0.02 (see **Table 9** & **Table 10**). The standard subtraction order for Cohen's d is 3.96 - 3.58 = 0.38, which showed the increase in grittiness. The effect size was medium, d = −0.39 (see **Table 11**). Therefore, the *Null*

hypothesis that stated mindfulness exercises do not have effect on resilience among ELMSN students was rejected and the research hypothesis that stated mindfulness exercises have effect on resilience among ELMSN students was accepted based on a p-value of 0.02 (Table 10).

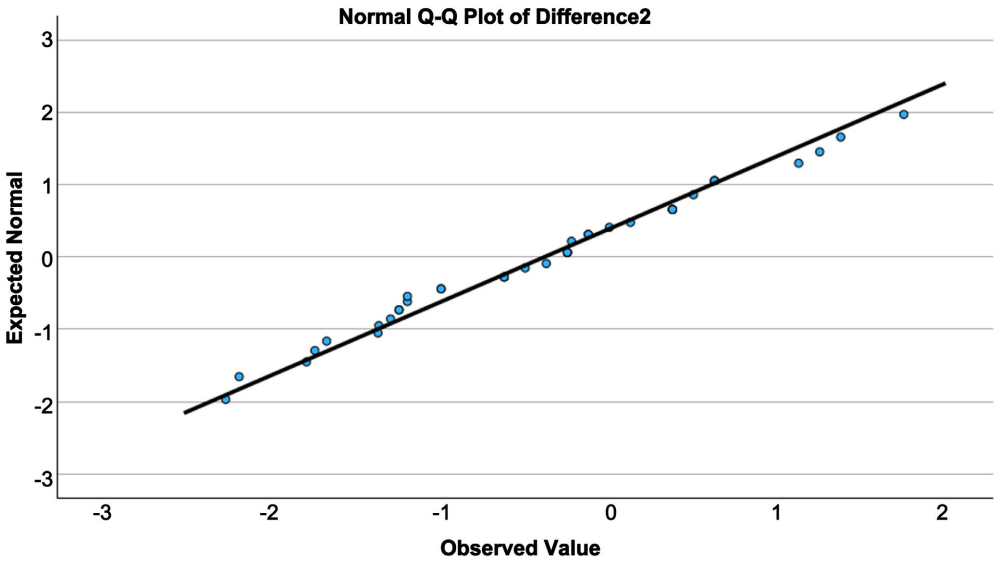

Figure 2. Normal distribution.

Table 8. Tests of normality.

Tests of Normality						
	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Difference 2	0.094	40	0.200*	0.981	40	0.736

*This is a lower bound of the true significance. [a]Lilliefors significance correction.

Table 9. Paired samples statistics.

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Gritty scores	3.5795	40	0.69626	0.11009
	Gritty scores	3.9640	40	0.49780	0.07871

Table 10. Paired samples test.

Paired Samples Test										
		Paired Differences					t	df	Significance	
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				One-Sided p	Two-Sided p
					Lower	Upper				
Pair 1	Gritty scores - Gritty scores	−0.38450	0.99212	0.15687	−0.70180	−0.06720	−2.451	39	0.009	0.019

Table 11. Paired samples effect sizes.

Paired Samples Effect Sizes						
			Standardizer[a]	Point Estimate	95% Confidence Interval	
					Lower	Upper
Pair 1	Gritty scores - Gritty scores	Cohen's d	0.99212	−0.388	−0.707	−0.064
		Hedges' correction	1.01172	−0.380	−0.693	−0.062

[a]The denominator used in estimating the effect sizes. Cohen's d uses the sample standard deviation of the mean difference. Hedges' correction uses the sample standard deviation of the mean difference, plus a correction factor.

6. Discussions

Anxiety and stress are very common among nursing students, and the course workload of students can be overwhelming but having the resilience to cope with any prevailing situations can be advantageous. Stress reduction and resilience can help students cope with the demands of nursing school, and part of developing resilience is learning positive ways to deal with stress [3]. Our intervention used several mindfulness exercises that students can adopt to manage anxiety levels and build resilience. The post survey after series of mindfulness exercises was not statistical significance in terms of anxiety reduction among students. However, with small effect size of Cohen's d = 0.22, the mean score of 7.0 before mindfulness exercises was higher than the mean score of 6.2 after exposure to several mindful exercises (**Table 5**). The small difference in the mean scores indicates a little positive change in the management of anxiety among the students but the difference was not statistically significant. The small effect size and changes in the mean scores suggest that changes in this dimension are more subtle and may require a more prolonged or intensive approach to allow greater improvements to be observed. Extending the mindfulness exercises for one more trimester may increase the effects on the students' anxiety management. There could be other extraneous variables affecting the students' anxiety and stress management for an example out of the 40 participants, 35 students were on financial but only 14 students did not work. Our study was very similar to an earlier study in which the Fall semester and Spring semester comparison of students' anxiety levels revealed no statistically significant differences [3]. This is not surprising; the process of being educated as a healthcare professional of any kind is stressful and anxiety-provoking [3], and our students are constantly learning didactically and clinically new concepts of how to be excellent nurses. Another study revealed that mindfulness did not significantly alleviate depression, anxiety, or stress over time, underscoring the need for longitudinal research to evaluate the durability of these effects [1]. It's obvious that Mindfulness-based approaches enable students to become aware of their emotions and manage their feelings [4]. The awareness of one's emotions and feelings correlates with adaptive abilities and well-being, and mindfulness supports the clinical and academic success of student nurses [2].

The findings of our study indicated that the use of mindfulness elevated the students' resilience. The comparison of pre-scores with the post-scores on the gritty scale revealed that students became grittier after series of the mindfulness exercises based on M = 3.58, SD = 0.70 before, and M = 3.96, SD = 0.50 after with a p-value of 0.02. The effect size was medium, d = −0.39 (approximately 0.4), and this is considered moderate effect [20] [21]. The grittier a student nurse becomes the more likely of effective coping to reduce stresses and anxiety. From a nursing perspective, resilience has been used to mean an individualized process of development that occurs using personal protective factors to successfully navigate perceived stress and adversities [2]. Mindfulness exercises emphasize self-awareness and self-efficacy. Self-efficacy among nurses has been found to contribute to the development of personal resilience [11]. The explanation for the increased grit scores can be due to the persistence for self-awareness and the self-belief that students can achieve their aims through series of mindfulness exercises. In nursing students, resilience is recognized as a critical quality that will enable them to face and solve the challenges encountered in their studies and future careers [10]. Nursing students are expected to meet various academic demands throughout their studies and therefore experience high levels of stress. Consequently, they must acquire the ability to thrive in adversity, and to learn and grow from such experiences. Resilient individuals can mobilize protective factors to help themselves rebound from distress, maintain an openness to change and exhibit prosocial behavior and empathy [10]. Resilient individuals may be affected by difficulties (e.g., trauma, loss); however, they are not lastingly overwhelmed by these experiences, and resilient people cope with these challenges by acquiring new skills, better mental health, potentiating compassion, and self-efficacy [8]. Self-efficacy is considered as a belief in one's personal competence that enables an individual to decide their degree of effort and persistence when faced with difficulties [6]. Individuals with a high level of mindfulness display a greater self-perception of well-being, are much better at coping with stress and are successful in their relations with others [9]. Therefore, increased resilience can increase confidence and lower reactional stress due to better coping strategies. Resilience has also been underlined as a potential factor to help nurses cope with professional difficulties without having an impact on one's mental well-being [8]. Resilience is a characteristic of the individual that is found in relation to nurses in challenging situations [6].

7. Strengths and Limitations

The strengths of this study include the use of credible tools with high reliability and validity. GAD-7 Anxiety has a construct validity of 0.915 co-efficiency, while the Grit tool internal consistency was shown as αs = 0.70, 0.77, and 0.82 [16] [18]. The study revealed the effectiveness of mindfulness exercises in the management of stress and resilience among undergraduate nurses. Limitations of this study include the use of convenience sample of students' cohort enrolled in the ELMSN

program, and it was conducted only in one school, thereby limiting the generalizability of the findings. Most of the participants were females with only five males, but that's expected because nursing profession is numerically dominated by female gender. However, the sample size of 40 participants was sufficient for the study as evidenced by power analysis (Table 1). Another limitation of the study is the lack of a control group, which prevented us from ruling out other extraneous factors that could have influenced the observed results. Future research could consider the use of randomized controlled designs to strengthen the validity of the findings. In addition, we suggest investigating the long-term effects of these interventions, since the impact of mindfulness exercises may increase with time and continued practice [22]. It would also be relevant to explore how resiliency can reduce stressful experiences and assist with coping, as these factors were not expressly addressed in this study. It is also important to note that the post survey was taken at the end of the third trimester, which coincided with the beginning of obstetrics and gynecology course, which may have contributed to increased stress and anxiety among the students.

8. Conclusions

Inadequate stress management among students leads to anxiety that often serves as a barrier to academic success. Students were able to manage their anxiety better with the mindfulness exercises, and it was evident that students were more resilient after the mindfulness exercises. Introduction of mindfulness exercises can assist students to be more confident and cope effectively with learning challenges throughout the undergraduate program. The adoption of mindfulness exercises can increase retention, academic success, and graduation rates among students. Practicing mindfulness exercises at home during leisure time by students should be further investigated and quantified. The adoption of mindfulness exercises can increase retention, academic success, and graduation rates among students.

Implication for Nursing

The research findings show that mindfulness exercises have effects on the resilience and stress management among students. Although the effect on stress management was not statistically significant but the difference in the mean scores was observed with small effect size. The standard subtraction order for Cohen's d is $6.2 - 7.00 = -0.8$, which showed the decrease in anxiety level among students. The effect on resilience based on gritty scores was statistically significant with a p-value of 0.02, Cohen's $d = 0.39$. Therefore, activities geared to raise the level of mindfulness exercises can be very beneficial if included in the nursing curriculum. Efforts should be directed to determine how students use these mindful exercises at home, because the awareness of what to do and the process of commitment to practice the exercises are two different concepts. More support system should be in place by faculty members to guide and encourage students to perform all those simple but effective mindful exercises. Given nursing students' challenging formative con-

text and the work context they will face as professionals, it is highly relevant to incorporate and evaluate evidence-based professional subjects to address stress and anxiety as a basis for effective supportive relationships and humanized care [5]. Mindfulness can potentially positively impact well-being and resilience in undergraduate nursing students [23].

Implications for nursing include expanding the body of knowledge regarding nursing students' resilience and coping strategies. Individuals with stronger dispositional mindfulness are often described as better attuned to the present moment and more capable of controlling their emotions and behaviors, and therefore they have greater psychological well-being [6] Future studies should focus on challenges students face at the clinical environments and determine the age categories mostly affected as undergraduate nursing students perceived that a mindfulness program has the potential to enhance well-being and future clinical practice [23].

Conflicts of Interest

The authors declare no conflicts of interest regarding the publication of this paper.

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Appendix

Mindfulness Curriculum

Cohort 6 Research: "Stress Management and Resilience Among Students Enrolled in the Entry Level Master of Science in Nursing (ELMSN) Program

Content: Mindfulness exercises on stress management and anxiety

Week/ Date	Mindfulness Topic	Mindfulness Facilitator
Week 1 Tuesday Jan 7	***Session 1:*** Raisin Exercise **Handout:** My Self-care Assessment	[redacted]
Week 2 Tuesday Jan 14	***Session 2:*** Body Scan **Handout:** My Self-care Plan	[redacted]
Week 3 Tuesday Jan 21	Dr. [redacted] w/ CAPS in-person at Stockton Campus (Chapel) or zoom Tuesday @ 5pm Zoom Link: [redacted]	[redacted]
Week 4 **Tuesday Jan 28 HA/Fund Midterm 1	***Session 3:*** Mindful Seeing	[redacted]
Week 5 Tuesday Feb 4	***Session 4:*** Mindful Listening	[redacted]
Week 6 Tuesday Feb 11	***Session 5:*** Five Senses Exercise	[redacted]
Week 7 Tuesday Feb 18	***Session 6:*** The Observer Meditation	[redacted]
Week 8 Tuesday Feb 25	***Session 7***: The Observer Meditation	[redacted]
Week 9 Tuesday March 4	***Session 8:*** The 3-Step Mindfulness Exercise	[redacted]
Week 10 Tuesday March 11	***Session 9:*** The 3-Minute Breathing Space	[redacted]
Week 11 Tuesday March 18	Dr. [redacted] w/ CAPS in-person at Stockton Campus (Chapel) or	[redacted]
	zoom Tuesday @ 5pm Zoom Link: [redacted]	
Week 12 Tuesday March 25	***Session 10:*** Meditate: A Mindful Guide to Transform Your Life	[redacted]