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Hemşirelik Öğrencilerinin Bilinçli Farkındalık Düzeyleri ve İlişkili Faktörler

Mindfulness Levels of Nursing Students and Associated Factors

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Öz

Amaç: Bu çalışmanın amacı, hemşirelik öğrencilerinin bilinçli farkındalık düzeyini ve etkileyen faktörleri ortaya koymaktır.

Gereç ve Yöntem: Çalışma, 2018 Aralık ve 2019 Mayıs ayları arasında Kuzey Kıbrıs'ta bulunan bir özel üniversitenin hemşirelik fakültesinde gerçekleştirilmiştir. Araştırmanın evreni ve örneklemi, 2018-2019 akademik yılının güz ve bahar dönemlerinde hemşirelik bölümünde öğrenim gören Türk ve yabancı lisans öğrencilerinden oluşmaktadır. Veriler, "Bilgi Formu" ve "Bilinçli Farkındalık Ölçeği" ile toplanmıştır.

Bulgular: Öğrencilerin bilinçli farkındalıkları orta düzeyde bulundu. Müzik enstrümanı öğrenen, kendini maceracı olarak tanımlayan ve stresi etkili yöneten öğrencilerin bilinçli farkındalık düzeylerinin daha yüksek olduğu belirlendi. Ayrıca spor ya da iyi oluş etkinliklerine katılmayan öğrencilerde bilinçli farkındalık düzeyleri anlamlı olarak daha yüksek bulundu ($p \leq 0.05$).

Sonuç: Araştırma sonuçları, hemşirelik öğrencilerinin bilinçli farkındalıklarının, entelektüel faaliyetlere katılımları, spor yapma alışkanlıkları, kişilik profilleri ve günlük stresle başa çıkma becerileri tarafından önemli ölçüde şekillendirildiğini göstermektedir.

Anahtar Kelimeler: Hemşirelik, Hemşirelik Öğrencisi, Farkındalık, Bilinçli Farkındalık

Abstract

Aim: The aim of the study was to reveal the mindfulness levels of nursing students and the factors influencing these levels.

Material and Methods: The study was conducted in the nursing faculty of a private university in Northern Cyprus during December 2018 and May 2019. The population and sample of the research consist of Turkish and foreign undergraduate students studying in the nursing department in the fall and spring semesters of the 2018-2019 academic year. Data were collected with the "Information Form" and "Mindfulness Attention Awareness Scale".

Results: The mean scores of students' mindfulness attention awareness were found at a moderate level. Mindfulness attention awareness was higher among students who learned a musical instrument, identified as adventurous, and who coped effectively with stress. Additionally, those not engaged in sports or well-being activities showed significantly higher mindfulness levels ($p \leq 0.05$).

Conclusion: The study demonstrates that nursing students' mindfulness attention is significantly shaped by their engagement in intellectual activities, participation in sports, personality profiles, and ability to cope with daily stress.

Keywords: Nursing, Nursing Student, Mindfulness, Mindfulness Attention

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Summary Statement

1. **What is known about this topic?**

Nursing students' mindfulness attention awareness is closely linked to lower perceived stress, better emotion regulation, and improved academic and clinical performance, as shown in recent post-2020 international studies.

2. **Conclusions of this article**

- The study demonstrates that nursing students' mindfulness attention awareness plays a protective role against stress and contributes to healthier emotional functioning during their education.
- Findings confirm that supporting mindfulness attention awareness may strengthen students' readiness for clinical practice and overall well-being.

3. **Contributions of this article**

- This article provides up-to-date evidence on mindfulness attention awareness levels among nursing students, offering practical implications for integrating mindfulness-enhancing strategies into nursing curricula to promote student resilience and learning quality.

Introduction

In response to the increasing complexity of today's healthcare systems and its impact on patient safety, nurses' capability for safe practice is challenged by cognitive attentional neglect and growing sources of distraction[16,18,34]. Consequently, teaching strategies in nursing education must prepare students to function effectively within this complexity and support the development of attention-regulation skills[8].

From this perspective, cultivating mindfulness has become a significant educational and psychological focus for nursing students, who frequently experience academic stress, emotional strain, and performance anxiety during clinical education. The demanding nature of nursing programs often results in heightened stress, emotional challenges, and reduced empathy—factors closely linked to patient care quality[28]. As a result, mindfulness has gained increasing attention in recent years as an effective approach to enhancing emotional resilience, academic performance, and well-being in nursing students[13,32].

Mindfulness, rooted in Buddhist philosophy, emphasizes present-moment awareness and fosters a sense of self-detachment[36]. It involves deliberate, non-judgmental attention to internal and external experiences as they unfold, influencing cognitive and emotional patterns[29,38]. As a psychological capacity, mindfulness contributes to improved self-regulation,

reduced anxiety, and lower levels of stress and depression across populations[41]. Moreover, it enhances well-being, mood stability, resilience, and coping skills by increasing individuals' tolerance of distressing emotions[1,7,19,21,31].

Research further shows that mindfulness-based interventions support nursing students by strengthening self-awareness, reducing stress, and promoting emotional regulation, helping them manage academic and clinical demands[10,22,28,37]. An emerging trend is the integration of mindfulness within nursing curricula—not as isolated sessions but as ongoing educational tools in courses such as communication, ethics, and professional development[27]. This encourages sustained self-awareness rather than temporary stress relief.

Given the emotionally demanding nature of nursing education, effective emotion regulation is essential for student well-being and patient care. Individuals who practice mindfulness are better able to reframe negative emotions, increasing resilience and adaptability[27]. This capacity is particularly important in clinical settings, where nursing students must remain composed while navigating complex patient situations[46]. Nursing students often experience higher stress levels than peers due to rigorous coursework and clinical pressures, including fear of making mistakes, exposure to suffering, communication challenges, and feelings of inadequacy[8,14,15,26,40,42]. Because of this, developing effective stress and emotion management strategies is essential, and mindfulness may serve as a valuable tool both academically and professionally[40]. Over the past decade, mindfulness-based training has gained recognition for reducing psychological and physiological stress responses among nursing students[9,36].

In light of the above, this study aims to determine the mindfulness levels of nursing students and provide recommendations for structuring nursing education programs based on the findings.

Material-Method

Aim of Study

The aim of the study was to determine the mindfulness levels of nursing students and the factors influencing these levels.

Design

This study was performed as a cross-sectional and descriptive study.

Setting and Sample

The study was conducted at a private university during December 2018 and May 2019. The population and sample of the research consist of Turkish and foreign undergraduate students studying in the nursing faculty of a private university in Northern Cyprus in the fall and spring

semesters of the 2018-2019 academic year. In the research, it is aimed to reach the whole universe. The study aimed to include all students enrolled in the Bachelor of Science in Nursing (BSN) program (N=950); the research was conducted with 498 students who voluntarily agreed to participate in the study. Accordingly, the study's participation rate was 52.4%.

Data Collection Tools

The research data were collected with " Information Form" and " Mindfulness Attention Awareness Scale- MAAS". Data were collected face-to-face. Filling out the form took 5-10 minutes.

Information Form. The form was created based on a review of the literature on mindfulness[2,10,22,28,37]. It consists questions about sociodemographic items about their relationship with the level of mindfulness as such as gender, age, country, residency, grade level, what they do for their personal and intellectual development, whether they are involved in any art or sports activities, whether they engage in activities that make them feel good in their daily life, how they assess their personality, their level of satisfaction with their life, whether they are a member of any civil society organization, and how they cope with stressful situations they encounter in their daily life.

Mindfulness Attention Awareness Scale (MAAS). The validity and reliability of the Mindfulness Attention Awareness Scale were established by Brown and Ryan in 2003[5]. It is a one-dimensional scale that aims to measure attention and awareness of present-moment experiences and assesses the absence or presence of mindful mental states over time. The MAAS works on a six-point scale that requires participants to assess their willful participation during a 15-item experience to measure characteristics of openness or acceptance to what is occurring in the present, 1 (*almost always*) to 6 (*almost never*). High scores reflect more mindfulness. The MAAS was found to have good internal consistency, with alphas ranging from .82 and .87 in student and adult samples[5]. The Cronbach's alpha value in this study was found to be .864.

Data Analysis

The data were analyzed in the IBM SPSS Statistics 25 program. While evaluating the study data, frequency distributions (number, percentage) were given for categorical variables, and descriptive statistics (mean, standard deviation) were given for numerical variables. The Kruskal-Wallis test was used to test the significance of the difference between the means of three or more groups that do not follow a normal distribution, and the Mann-Whitney U test was used to compare the differences between two independent groups that do not follow a normal distribution.

Ethical Approval

The study was conducted in accordance with the principles of the Declaration of Helsinki. Ethical approval was obtained from the ethics committee of a university (dated 22.11.2018 and numbered 2018/63-672) for the study. In addition, written informed consent was obtained from the students participating in the study.

Limitations

The findings of this study are limited to nursing students from a specific university, which restricts the generalizability of the results.

Results

The average age of the students participating in the study was 22.72±3.74, 72.7% were female, 37.6% were in their second year of study, and 46.4% had families living in Nigeria. It was determined that 44.2% of the students read books for their personal and intellectual development, 65.3% were not professionally involved in any branch of art, 52.6% were professionally involved in a sport, and 50.2% were engaged in an activity. It was found that 34.7% of students described themselves as helpful, and 71.7% stated that they were satisfied with their lives. It was observed that 94.2% of students were not members of any civil society organization, and 65.5% stated that they were able to cope with stress in their daily lives to some extent.

When the mean scores of students' mindfulness attention awareness levels were examined, it was found that they have a moderate level of mindfulness attention awareness (Table 1).

Table 1. Students' Average Scores For Mindfulness Attention Awareness Scale

Scale / Variable	Min	Max	X±SS
Mindfulness Awareness Levels	27.00	90.00	61.18±14.25

When comparing students' socio-demographic characteristics with their levels of mindfulness attention awareness (Table 2), it was found that students aged 20 and under, males, second-year students, and those living with their families in Nigeria had higher levels of conscious awareness; however, there was no statistically significant difference between these variables and levels of conscious awareness ($p \geq 0.05$).

Table 2. Comparison of Nursing Students' Socio-Demographic Characteristics and Levels of Mindfulness Attention Awareness

	X±SS	Test/p
Age		
20 and under	62.76±16.32	KW*= 4.514
21-23	59.31±13.49	p= 0.105
24 and over	61.96±12.84	
Gender		
Female	60.91±13.94	MWU**= 26064.50
Male	61.91±15.07	p= 0.311
Study Level		
First year	59.92±12.77	KW= 3.645
Second year	62.66±16.14	p= 0.302
Third year	60.79±13.82	
Fourth year	60.55±11.79	
Residency		
Palestine	60.50±12.54	
Nigeria	63.61±14.49	
Kongo	56.29±17.51	KW= 10.299
Zimbabwe	61.52±13.05	p= 0.172
Kenya	59.53±14.32	
Senegal	71.00±0.00	
Algeria	76.50±0.71	
Turkey	56.33±19.02	

*Kruskal-Wallis **Mann-Whitney U

When students' mindfulness attention awareness levels were compared with their participation/interest in social and intellectual activities (Table 3), it was found that students learning a musical instrument were found to have higher levels of mindfulness attention awareness than participants engaged in other activities, with a statistically significant difference between the groups ($p \leq 0.05$) and this difference originating from the same group. It was found that students who were interested in an art, those who did not engage in any well-being activities, those who were dissatisfied with their lives, and those who were not members of a non-governmental organization had higher levels of mindfulness attention awareness compared to others. It was also determined that those who were not interested in a sport had higher levels of mindfulness attention awareness, and that the difference between the groups was statistically significant ($p \leq 0.05$). Those who describe themselves as adventurous have a high level of mindfulness attention awareness, and the difference between personality profiles and mindfulness attention awareness level is statistically significant ($p \leq 0.05$), originating from those who describe themselves as romantic. Students who effectively cope with stress were found to have high levels of mindfulness attention awareness, and the difference between stress coping skills and mindfulness attention awareness levels was statistically significant ($p \leq 0.05$), originating from those who did not cope effectively with stress.

Table 3. Comparison of Students' Levels of Mindfulness Attention Awareness with Their Participation/Interest in Social and Intellectual Activities

	X±SS	Test/p
Individual and intellectual development		
Read boks	61.45±12.98	
Learn foreign language	62.71±14.38	
Go oto theater	70.64±13.08	KW*= 24.713
Go to the cinema	60.11±15.35	p= **0.000*** **
Learning a musical instrument	72.91±12.68	
Read newspaper an megazine	63.08±13.80	
Travel historical place	66.43±22.66	
Professional art involvement		
Yes	61.43±12.50	MWU**= 27560.50
No	61.05±15.12	p= 0.718
Professional sport involvement		
Yes	59.63±13.29	MWU**= 35067.50
No	62.91±15.09	p= **0.010*** **
Well-being activity (e.g., yoga, meditation)		
Yes	60.07±12,67	MWU**= 33912.00
No	62.30±15,63	p= 0.070
Personality profiles		
Perfectionist	62.68±11.47	
Helpful	64.91±13.65	
Success oriented	59.18±15.42	KW*= 34.411
Romantic	48.43±3.88	p= **0.000*** **
Obsever	60.81±15.44	
Interrogator	56.30±13.89	
Adventurer	66.41±12.40	
Challenger/Defier	56.69±15.09	
Peaceful	62.48±15.93	
Life satisfaction		
Yes	60.80±14.75	MWU**= 26922.50
No	62.14±12.91	p= 0.225
Non-governmental organization membership		
Yes	57.66±14.78	MWU**= 7773.00
No	61.40±14.21	p= 0.196
Daily stress coping level		
Sufficient	64.50±16.41	KW*= 10.095
Partially sufficient	60.63±13.32	p= **0.006*** **
Insufficient	56.84±13.07	

*Kruskal-Wallis **Mann-Whitney U *** $p \leq 0.05$

Discussion

Our study found that students have a moderate level of mindfulness awareness. This result parallels the findings of Kurt et al. (2024)[25] in their study conducted in Turkey, which found that nursing students have a moderate level of mindfulness awareness. Furthermore, Mathkor (2025)[33] also determined that nursing students possess a moderate level of mindfulness awareness. Also, research by Hülsheger et al. (2013)[20] and Beddoe & Murphy (2004)[4] has shown that nursing students often experience moderate mindfulness. Moderate mindfulness levels suggest that students possess some awareness of their thoughts and emotions but may struggle to maintain full attention and acceptance during stressful situations. These results can

be attributed to the high levels of academic and clinical stress inherent in nursing education. Additionally, the variability indicated by the standard deviation (14.25) reflects individual differences among students. Some students may naturally practice mindfulness more effectively, while others may require structured guidance. These results highlight the importance of incorporating regular mindfulness training into nursing education, not only to support students' mental well-being but also to foster patient-centered care and continuous professional development.

In this study, mindfulness attention awareness levels did not show significant differences according to age, gender, study level, or residency. These findings suggest that mindfulness attention awareness among nursing students is not strongly determined by sociodemographic characteristics. Kurt et al. (2024)[25] similarly reported no significant differences in mindfulness scores by age or gender among nursing students, emphasizing that shared academic and clinical stressors may exert a stronger influence than demographic factors. Likewise, Alzayyat et al. (2023)[3] noted that mindfulness levels of university students are more strongly associated with perceived stress and social support than with basic demographic features. Also, Zhang et al. (2022)[47] highlighted that mindfulness attention awareness in health sciences students is shaped predominantly by resilience and coping strategies rather than study level, and this result is consistent with post-pandemic research showing that students across all classes face similar cognitive and emotional demands. Although the mean scores differed numerically across countries, the lack of statistical significance aligns with cross-cultural studies showing that while cultural background may influence mindfulness practices, such differences often diminish in international academic environments where students encounter similar stressors and adaptation processes[3,25,43,47].

This study examined the relationship between nursing students' participation in social and intellectual activities and their mindfulness attention awareness. The findings revealed significant differences in mindfulness attention awareness scores across several behavioral and social variables. Intellectual engagement—such as reading books, learning foreign languages, attending theater or cinema, reading newspapers or magazines, and visiting historical places—was found to be significantly associated with higher mindfulness attention awareness levels ($p < 0.001$). These results are consistent with recent studies showing that cultural and cognitive activities enhance psychological resilience, promote cognitive flexibility, and reduce stress among university students[23,27,28]. Professional sports participation was also found to significantly improve well-being. This aligns with the literature indicating that regular physical activity reduces anxiety, improves sleep quality, and increases self-efficacy among nursing

students who often experience heavy academic loads and clinical stress[44,45]. Although engagement in professional art activities did not yield significant differences, contemporary studies suggest that art-related activities can reduce burnout and depressive symptoms[35]. The lack of significance in this study may stem from varying levels of intensity or frequency of art engagement. Significant variation in well-being levels across personality types ($p<0.001$) suggests that personality traits play an important role in mindfulness attention, stress management, and psychological health. In this study, students with an adventurer personality type had the highest mindfulness attention awareness scores compared to other personality groups. This is an important and theoretically consistent finding. Adventurer-type individuals—often associated with openness to experience, curiosity, and willingness to embrace new situations—tend to display traits that facilitate mindful awareness. Mindfulness requires cognitive flexibility, present-moment focus, and a non-judgmental acceptance of experiences, which aligns closely with the characteristics of individuals who are spontaneous, exploratory, and comfortable with uncertainty. Recent literature supports this relationship. Studies indicate that individuals with high openness to experience—a personality dimension strongly overlapping with adventurous traits—exhibit higher mindfulness levels[11,17]. Adventurer-type individuals often use active and proactive coping strategies, which are positively associated with mindfulness and resilience[28]. Their tendency to approach challenges rather than avoid them may explain why their mindful awareness scores were higher than those of other personality types in the current study. On the contrary, personality profiles such as "romantic," "observer," or "interrogator" demonstrated comparatively lower mindfulness attention scores. These personality types may be more prone to rumination, emotional reactivity, or excessive cognitive load—factors known to interfere with mindfulness awareness[31]. Overall, the finding highlights that personality plays a meaningful role in shaping mindfulness attention levels in nursing students. This suggests that mindfulness-based interventions in nursing curricula may need to be personalized, offering additional support to students whose personality characteristics make attention regulation and emotional balance more challenging. Daily stress-coping levels were also significantly associated with mindfulness attention awareness. Recent studies highlight that nursing students' stress levels increased after the COVID-19 pandemic, making coping strategies—including mindfulness, breathing exercises, physical activity, and cognitive reframing—crucial for psychological stability[24,39].

In this study, no significant differences were found in mindful awareness levels based on students' membership in non-governmental organizations (NGOs) or their life satisfaction ($p > 0.05$). Recent literature supports this finding, indicating that engagement alone in social or

volunteer activities does not automatically enhance mindfulness unless these activities involve reflective practices or sustained personal engagement[12,35]. Similarly, life satisfaction may be influenced by broader social, academic, and personal factors, while mindfulness reflects moment-to-moment attentional control and awareness, which may not directly correlate with general life satisfaction[6]. These results suggest that interventions aiming to improve mindfulness should focus on active, consistent, and structured practices—such as mindfulness meditation, yoga, or reflective exercises—rather than relying solely on general social participation or subjective well-being measures.

Conclusion

The study demonstrates that nursing students' mindfulness attention is significantly shaped by their engagement in intellectual activities, participation in sports, personality profiles, and ability to cope with daily stress. These findings underscore the need for universities and nursing faculties to adopt a holistic educational approach that supports not only academic competence but also psychological, emotional, social and intellectual development. Strengthening mindfulness attention has the potential to enhance students' academic resilience, reduce burnout, and improve readiness for demanding clinical environments. Higher levels of mindfulness may help nursing students cope more effectively with the demands of clinical education and future nursing practice. For future it is suggested to examine the impact of digital learning environments and post-pandemic educational changes on nursing students' mindfulness attention awareness.

Authors Contributions

Conceptualization and study design: BI, STIJ, Material preparation, data collection and analysis: BI, STIJ, ÇA, The first draft of the manuscript: BI, ÇA, and all authors commented on previous versions of the manuscript. All authors read and approved the final manuscript.

Conflict of Interest

All authors of this article declare that there is no conflict of interest. Also, we have no relevant financial interests in this manuscript.

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