

Risk of anxiety-related sleep disorder in nursing students

Riesgo de trastorno del sueño relacionado con ansiedad en estudiantes de enfermería

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ABSTRACT

Introduction: Anxiety affects 29% of the world's population, with higher incidence in females (77%) and this begins before the age of 18 years. Academic pressure aggravates anxiety and can lead to severe or serious mental health problems. **Objective:** To correlate anxiety and sleep disorders in university students. **Methods:** This quantitative, descriptive, cross-sectional study seeks to test hypotheses about anxiety and sleep disorders in 100 nursing students of the Technical University of Ambato through surveys, analyzing data in SPSS and Excel. **Results:** 85% of the students experience severe levels of anxiety, which can negatively affect their sleep quality and general well-being. **Conclusion:** Anxiety in university students, especially in health areas, can lead to more serious mental health problems and affect their academic performance and clinical skills. Implementing psychological support and stress management programs is essential to improve their well-being and academic performance.

Keywords: Anxiety in students, sleep disorders, students quality of life, mental health.

RESUMEN

Introducción: La ansiedad afecta al 29% de la población mundial, con mayor incidencia en mujeres (77%) y esto comienza antes de los 18 años. La presión académica agrava la ansiedad y puede llevar a problemas de salud mental severos o graves. **Objetivo:** Correlacionar la ansiedad y los trastornos del sueño en estudiantes universitarios. **Métodos:** El estudio cuantitativo, descriptivo y transversal, busca probar hipótesis sobre ansiedad y trastornos del sueño en 100 estudiantes de enfermería de la Universidad Técnica de Ambato mediante encuestas, analizando datos en SPSS y Excel. **Resultados:** El 85% de los estudiantes experimentan niveles severos de ansiedad, lo cual puede afectar negativamente su calidad del sueño y su bienestar general. **Conclusión:** La ansiedad en estudiantes universitarios, especialmente en áreas de la salud, puede derivar en problemas de salud mental más graves y afectar su rendimiento académico y habilidades clínicas. Implementar programas de apoyo psicológico y manejo del estrés es esencial para mejorar su bienestar y desempeño académico.

Palabras clave: Ansiedad en los estudiantes, trastornos del sueño, calidad de vida de los estudiantes, salud mental.

ARTICLE HISTORY

Received: 2024-05-28
Revised Version: 2024-08-13
Accepted: 2024-08-30
Published: 2024-15-09
Copyright: © 2024 by the authors
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Document type: Article

ARTICLE INFORMATION

Main topic:
Anxiety and sleep disorder in students
Main practical implications:
The article presents original empirical evidence that can be used mainly in the context of developing countries to understand some mental health disorders that may negatively affect students' performance and life quality.

INTRODUCTION

According to the World Health Organization (WHO, 2023) worldwide, 29% of people present anxiety related to different psychosocial factors, while the Pan American Health Organization (PAHO, 2024), the World Health Organization (PAHO, 2024)men and 3.6% of men suffer from anxiety, where the presence of this discomfort occurs before the age of 18.

Anxiety is a frequent problem that nowadays increases in young university students since they may feel considerable pressure to get good grades and meet academic expectations, whose discomfort is seen to increase during examination periods (Estrada-Araoz, 2020). The research of Castillo et al. (2021) highlights that untreated anxiety can lead to more serious mental health problems such as depression, post-traumatic stress disorder or suicidal ideation and significantly affect the quality of personal and family life.

Anxiety is usually a normal biological reaction to respond to the environment. However, when it exceeds a person's ability to adapt to his or her environment, it becomes a pathological condition. In these cases, excessive anxiety is accompanied by a variety of psychological and psychosomatic disorders (Joseph et al., 2020).

In students in the health area, the prevalence ranges between 19 - 43%, on the other hand, when students fail to adapt to anxiety events can trigger feelings of exhaustion, with attitude of devaluation, loss of interest or dehumanization, and increase doubts of their value and personal fulfillment, which could impact the development of clinical skills and decision making in their future careers (Rivero, 2022).

It has been found that one of the causes of anxiety is academic stress, becoming a significant and frequent problem in higher education, and constitutes a risk factor for multiple emotional and academic difficulties, evidencing a high percentage of students with high academic stress. Although an adequate level of academic stress is thought to be conducive to increase persistence in performance and therefore the improvement of this, however, when this exceeds a certain increase can be a risk factor for anxiety and depression, dissatisfaction with life, psychological distress, difficulty falling asleep and feeling physically tired, poor adaptation to college and poor academic results. However, in Ecuador there is no research on the risk of sleep disorders related to anxiety in university students.

However, it is evident how anxiety is a very important issue in mental health faced by students due to the high demands and demands they imply for academic, professional and personal development (Mercado et al., 2024). The lack of specific studies in the area of mental health is what highlights the importance of addressing this issue of this particular group. Continuous exposure to emotionally challenging situations to their training and clinical practice increases the vulnerability of nursing students to feelings of anxiety, stress, etc. And these predispose to develop disorders such as insomnia or daytime hypersomnia, which weaken the cognitive part of the students and consequently affect the performance and academic response of university students.

As we grow up and adapt to our daily tasks, which significantly increase with age, the demand for effort and pressure to advance educationally means that these disorders end up interrelated and that is where a favorable environment is created to trigger emotional problems in susceptible people who without realizing it can significantly and potentially affect their own mental health (Velástegui et al., 2022). This research is based on the need to deepen the relationship between anxiety and sleep disorders, with the aim of identifying the risk of anxiety-related sleep disorder.

Continuous exposure to stressful situations can have a negative effect on mental health, triggering a series of emotional disorders ranging from anxiety to more serious conditions that if recognized in time and with a good management of these, the risk of affecting the psychological, social and performance of university students would decrease, so we could understand the mechanisms underlying these emotional responses in order to develop more effective strategies to intervene and provide psychological support.

It is important to address this problem in a comprehensive manner due to its social and economic relevance. Serious emotional disorders can have a significant impact on people's quality of life and can have consequences in different areas, such as academic performance, work productivity, and personal relationships (Toala et al., 2023).

The study by Morales and Peralta (2024) analyzes the complex interaction between anxiety and motivation in high school students in Mexico. It highlights the high prevalence of anxiety, exacerbated by the COVID-19 pandemic, and its detrimental impact on academic performance and school dropout.

While moderate levels of anxiety can be motivating, high levels are often harmful. Motivation, especially intrinsic motivation, is considered crucial for academic performance and may act as a shield against the negative effects of anxiety. The study found a negative relationship between anxiety and intrinsic knowledge motivation in women, and a positive relationship of motivation with anxiety, although no significant relationship was found between total anxiety and academic performance.

The study of Bustos and Pinos (2023) evaluated anxiety and self-esteem in 310 adolescents from an educational unit in Latacunga, Ecuador, finding that 13.2% were at risk of anxiety and 9.4% had a severe degree of anxiety, while 36.1% had low self-esteem and 29.7% had moderate self-esteem, requiring psychological attention. A low and negative correlation was found between anxiety and self-esteem, stronger in males, without significant differences by family nucleus, but with variations according to age, being more pronounced between 15 and 17 years of age. These findings are framed in a post-pandemic context, with factors such as poverty and volcanic activity that possibly influenced the mental health of the adolescents evaluated.

In the study by González et al. (2021) evaluated the relationship between anxiety and excessive daytime sleepiness (EDS) in 173 medical students, finding that 59.5% presented anxiety symptoms and 27.2% daytime sleepiness. A statistically significant association was observed between anxiety and sleepiness ($p=0.036$; $OR=2.161$), with a moderate positive correlation ($r=0.28$; $p=0.000$), with no differences by sociodemographic factors. These findings are framed in the context of the high academic and clinical demands faced by medical students, increasing the risk of anxiety and sleep disorders, which have a complex bidirectional relationship that negatively impacts their mental health and performance.

METHODOLOGY

The study has a quantitative approach with a descriptive and cross-sectional design, it has a correlational scope, uses the collection and analysis to answer the research questions, in order to test the hypotheses previously established. It is based on numerical measurement, counting and frequently on the use of statistics to accurately establish patterns of behavior in a population and is based on a deductive and logical scheme, it is reductionist and intends to generalize the results of its studies by means of representative samples.

Inclusion criteria:

- Students enrolled in the sixth and seventh semester of the Nursing program at the Technical University of Ambato.
- Men and Women.
- Students who give consent to participate in the study.

Exclusion criteria:

- Students absent on the day of the survey
- Students who do not complete the instrument.

Of which 100 students met the criteria determined to avoid bias, the sample is representative. The data were obtained during the month of May 2024 at the Technical University of Ambato from sixth and seventh year nursing students.

The results of the applied surveys were tabulated in SPSS and the percentages per question of each one of the surveys were extracted, after which the variables (questions) of each test were calculated, generating a new variable of results TYPES OF ANXIETY to name the results of the bai test, likewise with the monterrey questionnaire with the new variables of the TYPES OF SLEEP DISORDER (Insomnia, Apnea, Somnolence, Stimulant, Hypnotic, Sleepwalking, Paralysis, Nightmares, Enuresis, Bruxism, Restless Legs, Somniloquy and Snoring).

The variables were then recoded to obtain anxiety (from 0 to 21 very mild, from 22 to 35 moderate and from 36 onwards severe) and sleep disorder (from 0 to 60 no sleep disorder and from 61 to 150 sleep disorder). After this, a count variable was used to define the number of disorders suffered; finally, descriptive analyses were generated to generate the frequency table determining the percentages of each of the disorders and their respective graphs.

The data collected will be analyzed using Excel statistical software, which will allow the generation of descriptive statistics, such as averages and percentages. This methodology has been carefully designed to investigate the issues of online science outreach in relation to health. The collection of data through surveys will allow obtaining a detailed view of students' perceptions and will provide valuable information for the understanding of this phenomenon.

The present study takes into account the fundamental principles of privacy and confidentiality when dealing with data and information collected during its development. Aligned with the International Declaration on Medical Ethics (Declaration of Helsinki), it promotes the integral safeguarding of the physical-emotional well-being, as well as related legal aspects from the detailed analysis that allows guaranteeing a thorough evaluation about potential risks and existing benefits.

RESULTS AND DISCUSSION

In this section, the main empirical findings are presented and discussed. In the Table 1 and Figure 1, it is highlighted that anxiety appears to be a significant problem, with 85% of students experiencing severe levels of anxiety, which may negatively affect sleep quality. This can be related to the high percentages of insomnia (77%) and sleepiness (72%) in the sample.

In terms of specific sleep disorders, sleep apnea appears to be a common problem, with 48% of students experiencing some degree of this disorder. This can have serious long-term health implications if not properly treated. Sleepwalking also appears to be relatively common, with 49% of students experiencing moderate to severe levels. Sleep paralysis, although less common, affects 31% of the sample, which can be a frightening experience for those who experience it.

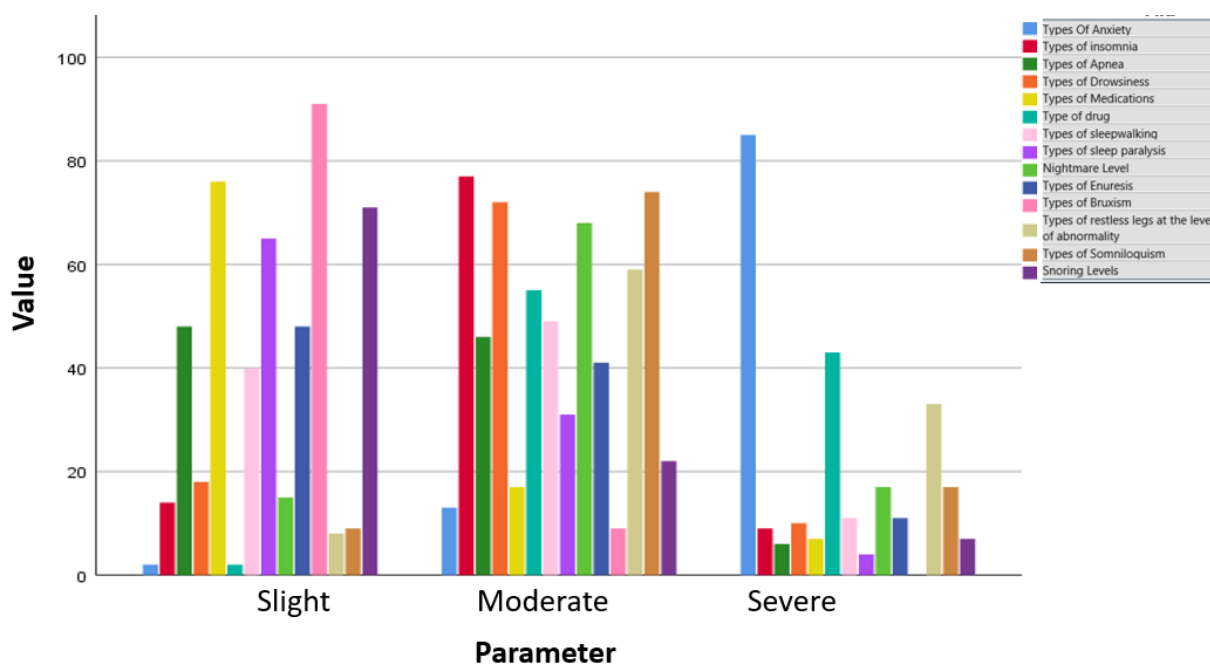
In terms of sleep-related behaviors, bruxism (teeth grinding) is quite prevalent, with 91% of students reporting some level of this problem. It is also interesting to note that snoring levels are high, with 71% of students experiencing this problem. These data suggest that sleep disorders and sleep-related problems are quite common among students, which can have a significant impact on their physical and mental health.

Table 1. Anxiety Test

	Low	Moderate	Severe
Types Of Anxiety	2.0%	13.0%	85.0%
Types of insomnia	14.0%	77.0%	9.0%
Types of Apnea	48.0%	46.0%	6.0%
Types of Drowsiness	18.0%	72.0%	10.0%
Types of Medications	76.0%	17.0%	7.0%
Type of drug	2.0%	55.0%	43.0%
Types of sleepwalking	40.0%	49.0%	11.0%
Types of sleep paralysis	65.0%	31.0%	4.0%
Nightmare Level	15.0%	68.0%	17.0%
Types of Enuresis	48.0%	41.0%	11.0%
Types of Bruxism	91.0%	9.0%	0.0%
Types of restless legs at the level of abnormality	8.0%	59.0%	33.0%
Types of Somniloquism	9.0%	74.0%	17.0%
Snoring Levels	71.0%	22.0%	7.0%

Source: Authors' elaboration with the research data

Figure 1. Types of Anxiety



Source: Authors' elaboration with the research data

The Table 2 shows the mean anxiety in this sample of 100 students is 2.83 on a scale of 1 to 3, suggesting that, on average, students experience moderate to severe levels of anxiety. Looking at the distribution of anxiety, it can be seen that 2% of the students report very low levels of anxiety, 13% report moderate levels, and 85% report severe levels. This indicates that the vast majority of students in this sample experience significant levels of anxiety.

These results show that anxiety is a major problem among students and that most students can benefit from interventions to manage and reduce anxiety levels. It is important to take these findings into account when developing support and treatment strategies for students

Table 2. Types of Anxiety

TYPES OF ANXIETY		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Low	2	2.0	2.0	2.0
	Moderate	13	13.0	13.0	15.0
	Severe	85	85.0	85.0	100.0
	Total	100	100.0	100.0	

Source: Authors' elaboration with the research data

Insomnia

The Table 3 reveals the mean insomnia in this sample of 100 students is 1.95 on a scale of 1 to 3, suggesting that, on average, students experience moderate levels of insomnia. Looking at the distribution of insomnia, it can be seen that 14% of students report mild levels of insomnia, 77% report moderate levels, and 9% report severe levels. This indicates that the majority of students in this sample experience significant levels of insomnia, with moderate insomnia being the most common.

These results suggest that insomnia is a common problem among students and that most students can benefit from interventions to improve sleep quality and duration.

Table 3. Types of Insomnia

TYPES OF INSOMNIA		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Low	14	14.0	14.0	14.0
	Moderate	77	77.0	77.0	91.0
	Severe	9	9.0	9.0	100.0
	Total	100	100.0	100.0	

Source: Authors' elaboration with the research data

Apnea

The table 4 exposes the mean sleep apnea in this sample of 100 students is 1.58 on a scale of 1 to 3, suggesting that, on average, students experience moderate levels of sleep apnea.

Looking at the distribution of sleep apnea, it can be seen that 48% of students report mild levels of sleep apnea, 46% report moderate levels, and 6% report severe levels. This indicates that the majority of students in this sample experience significant levels of sleep apnea, with mild sleep apnea being the most common.

These results suggest that sleep apnea is a common problem among students and that most students may benefit from interventions to improve sleep quality and duration.

Table 4. Types of Apnea

Types of Apnea		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Low	48	48.0	48.0	48.0
	Moderate	46	46.0	46.0	94.0
	Severe	6	6.0	6.0	100.0
	Total	100	100.0	100.0	

Source: Authors' elaboration with the research data

Drowsiness

The table 5 shows that the mean sleepiness in this sample of 100 students is 1.92 on a scale of 1 to 3, suggesting that, on average, students experience moderate levels of sleepiness.

Looking at the distribution of sleepiness, it can be seen that 18% of students report mild levels of sleepiness, 72% report moderate levels, and 10% report severe levels. This indicates that the majority of students in this sample experience significant levels of sleepiness, with moderate sleepiness being the most common.

These results suggest that sleepiness is a common problem among students and that most students may benefit from interventions to improve sleep quality and duration, as well as to address possible underlying causes of sleepiness.

Table 2. *Type of Drowsiness*

Types of Drowsiness		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Low	18	18.0	18.0	18.0
	Moderate	72	72.0	72.0	90.0
	Severe	10	10.0	10.0	100.0
	Total	100	100.0	100.0	

Source: Authors' elaboration with the research dat

Stimulant

Following Table 6 reveals that the mean use of stimulants as medications in this sample of 100 students is 1.31 on a scale of 1 to 3, suggesting that, on average, students report a low level of use of these medications.

Looking at the distribution of stimulant use, it can be seen that 76% of students report mild use, 17% report moderate use, and 7% report severe use. This indicates that the majority of students in this sample report mild use of stimulants as medication. It is important to keep in mind that the use of stimulants as medication can have implications for students' physical and mental health, and it is advisable to address any problematic use through appropriate interventions.

Table 3. *Type of Drug Stimulant*

Stimulant Type of Medication		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Low	76	76.0	76.0	76.0
	Moderate	17	17.0	17.0	93.0
	Severe	7	7.0	7.0	100.0
	Total	100	100.0	100.0	

Source: Authors' elaboration with the research data

Hypnotic

The Table 7 shows that the mean use of hypnotics as medications in this sample of 100 students is 2.41 on a scale of 1 to 3, suggesting that, on average, students report a moderate to severe level of use of these medications.

Looking at the distribution of hypnotic use, it can be seen that 2% of students report mild use, 55% report moderate use, and 43% report severe use. This indicates that a significant proportion of students in this sample report moderate to severe use of hypnotics as medications. It is important to keep in mind that the use of hypnotics as medication can have implications for students' physical and mental health, and it is advisable to address any problematic use through appropriate interventions or the consequences can be severe.

Table 4. *Hypnotic Type of Medication*

Hypnotic type of medication		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Low	2	2.0	2.0	2.0
	Moderate	55	55.0	55.0	57.0
	Severe	43	43.0	43.0	100.0
	Total	100	100.0	100.0	

Source: Authors' elaboration with the research data

Sleepwalking

The Table 8 displays the mean sleepwalking in this sample of 100 students is 1.71 on a scale of 1 to 3, suggesting that, on average, students experience moderate levels of sleepwalking.

Looking at the distribution of sleepwalking, it can be seen that 40% of students report mild levels of sleepwalking, 49% report moderate levels, and 11% report severe levels. This indicates that the majority of students in this sample experience significant levels of sleepwalking, with moderate sleepwalking being the most common. It is important to note that sleepwalking can have implications for the safety and well-being of students, especially in environments where they may put themselves in danger while asleep. It is advisable to address any sleepwalking issues through the guidance of a healthcare professional to avoid future consequences.

Table 5. *Types of sleepwalking*

Types of sleepwalking		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Low	40	40.0	40.0	40.0
	Moderate	49	49.0	49.0	89.0
	Severe	11	11.0	11.0	100.0
	Total	100	100.0	100.0	

Source: Authors' elaboration with the research data

Paralysis

On the other hand, Table 9 reveals that the mean sleep paralysis in this sample of 100 students is 1.39 on a scale of 1 to 3, suggesting that, on average, students experience low to moderate levels of sleep paralysis.

Looking at the distribution of sleep paralysis, it can be seen that 65% of students report mild levels of sleep paralysis, 31% report moderate levels, and 4% report severe levels. This indicates that the majority of students in this sample experience low to moderate levels of sleep paralysis, with mild sleep paralysis being the most common. It is important to keep in mind that sleep paralysis can be a frightening and disturbing experience for those who experience it.

Table 6. *Types of sleep paralysis*

Types of sleep paralysis		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Low	65	65.0	65.0	65.0
	Moderate	31	31.0	31.0	96.0
	Severe	4	4.0	4.0	100.0
	Total	100	100.0	100.0	

Source: Authors' elaboration with the research data

Nightmares

The table 10 reveals that the mean level of nightmares in this sample of 100 students is 2.02 on a scale of 1 to 3, suggesting that, on average, students experience moderate levels of nightmares.

Looking at the distribution of the level of nightmares, it can be seen that 15% of the students report mild levels of nightmares, 68% report moderate levels, and 17% report severe levels. This indicates that the majority of students in this sample experience nightmares with moderate frequency, while a significant proportion experience nightmares with severe frequency. It is important to note that frequent nightmares can have a negative impact on the quality of sleep and psychological well-being of students. It is advisable to address this problem through appropriate interventions, such as cognitive-behavioral therapies for insomnia and stress management, and in some cases, seek guidance from a mental health professional.

Table 7. *Nightmare Level*

Nightmare Level		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Low	15	15.0	15.0	15.0
	Moderate	68	68.0	68.0	83.0
	Severe	17	17.0	17.0	100.0
	Total	100	100.0	100.0	

Source: Authors' elaboration with the research data

Enuresis

Moreover, the Table 11 shows the mean enuresis in this sample of 100 students is 1.63 on a scale of 1 to 3, suggesting that, on average, students experience low to moderate levels of enuresis.

Looking at the distribution of enuresis, it can be seen that 48% of students report mild levels of enuresis, 41% report moderate levels, and 11% report severe levels. This indicates that the majority of students in this sample experience low to moderate levels of enuresis, with mild enuresis being the most common. It is important to consider that bedwetting can have a significant impact on the quality of life and emotional well-being of students. It is advisable to address this problem with behavioral therapies and lifestyle changes, and in some cases, seek the guidance of a health professional.

Table 8. Types of Enuresis

Types of Enuresis		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Low	48	48.0	48.0	48.0
	Moderate	41	41.0	41.0	89.0
	Severe	11	11.0	11.0	100.0
	Total	100	100.0	100.0	

Source: Authors' elaboration with the research data

Bruxism

The Table 12 exposes the mean bruxism in this sample of 100 students is 1.72 on a scale of 1 to 3 (mild to severe), suggesting that, on average, students experience moderate levels of bruxism.

Looking at the distribution of bruxism, it can be seen that 37% of the students report mild levels of bruxism, 54% report moderate levels, and 9% report severe levels. This indicates that the majority of students in this sample experience moderate to severe levels of bruxism, with moderate bruxism being the most common. It is important to keep in mind that bruxism can have an impact on the dental health and overall well-being of students.

Table 9. Types of Bruxism

Types of Bruxism		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Low	37	37.0	37.0	37.0
	Moderate	54	54.0	54.0	91.0
	Severe	9	9.0	9.0	100.0
	Total	100	100.0	100.0	

Source: Authors' elaboration with the research data

Types of Abnormal Level Restless Legs

Table 13 reveals that the mean restless legs syndrome to abnormality level in this sample of 100 students is 2.25 on a scale of 1 to 3, suggesting that, on average, students experience moderate to severe levels of restless legs syndrome.

Looking at the distribution of restless legs syndrome, it can be seen that 8% of the students report mild levels, 59% report moderate levels, and 33% report severe levels. This indicates that a significant proportion of students in this sample experience moderate to severe levels of restless legs syndrome.

Table 10. Types of abnormal restless legs

Types of restless legs at the level of abnormality		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Low	8	8.0	8.0	8.0
	Moderate	59	59.0	59.0	67.0
	Severe	33	33.0	33.0	100.0
	Total	100	100.0	100.0	

Source: Authors' elaboration with the research data

Somniloquy

The Table 14 shows that the mean somniloquy in this sample of 100 students is 2.08 on a scale of 1 to 3, suggesting that, on average, students experience moderate levels of somniloquy.

Looking at the distribution of somniloquy, it can be seen that 9% of students report mild levels, 74% report moderate levels, and 17% report severe levels. This indicates that the majority of students in this sample experience moderate levels of somniloquy, while a minority experience mild or severe levels.

Table 11. *Types of Somniloquies*

Types of Somniloquies		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Low	9	9.0	9.0	9.0
	Moderate	74	74.0	74.0	83.0
	Severe	17	17.0	17.0	100.0
	Total	100	100.0	100.0	

Source: Authors' elaboration with the research data

Snoring

The table 15 shows that the mean snoring levels in this sample of 100 students is 1.36 on a scale of 1 to 3, suggesting that, on average, students experience low levels of snoring.

Looking at the distribution of snoring levels, it can be seen that 71% of students report mild levels, 22% report moderate levels, and 7% report severe levels. This indicates that the majority of students in this sample experience mild levels of snoring, while a minority experience moderate or severe levels.

Table 12. *Snoring Levels*

Snoring Levels		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	Low	71	71.0	71.0	71.0
	Moderate	22	22.0	22.0	93.0
	Severe	7	7.0	7.0	100.0
	Total	100	100.0	100.0	

Source: Authors' elaboration with the research data

Disorders

Finally, Table 16 reveals that the mean number of anxiety disorders and sleep disorders in this sample of 100 students is 8.93, suggesting that, on average, students have about 9 anxiety-related disorders and sleep disorders.

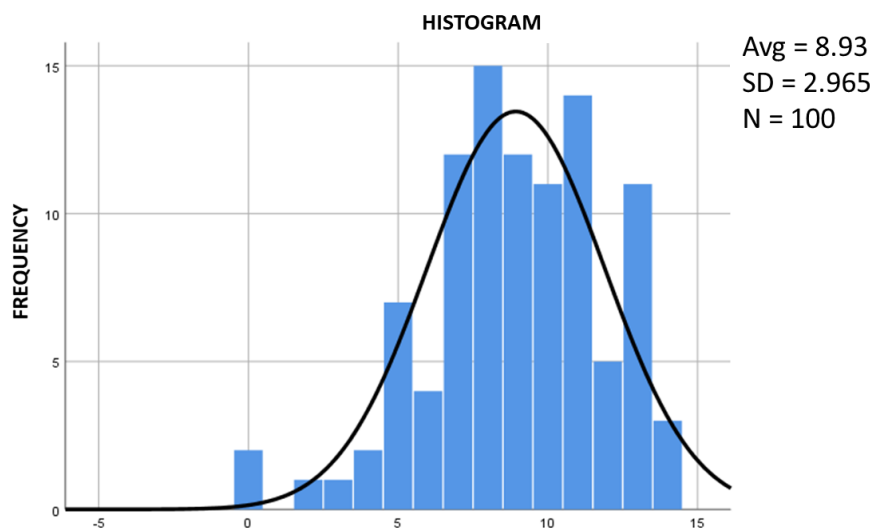
When looking at the distribution of the number of disorders, it can be seen that there is a variety of situations. For example, 2% of the students have none of these disorders, while some have up to 14 disorders. Most students have between 7 and 13 disorders, with a peak at 8 and 11 disorders.

These results suggest that anxiety and sleep disorders may be interrelated and that many students experience multiple disorders in these areas. It is important to address these problems in a comprehensive manner, taking into account the complexity and possible interaction between anxiety disorders and sleep disorders.

Table 13. *Anxiety and Sleep Disorders*

Have Anxiety and Sleep Disorders		Frequency	Percentage	Valid percentage	Cumulative percentage
Valid	0	2	2.0	2.0	2.0
	2	1	1.0	1.0	3.0
	3	1	1.0	1.0	4.0
	4	2	2.0	2.0	6.0
	5	7	7.0	7.0	13.0
	6	4	4.0	4.0	17.0
	7	12	12.0	12.0	29.0
	8	15	15.0	15.0	44.0
	9	12	12.0	12.0	56.0
	10	11	11.0	11.0	67.0
	11	14	14.0	14.0	81.0
	12	5	5.0	5.0	86.0
	13	11	11.0	11.0	97.0
	14	3	3.0	3.0	100.0
	Total	100	100.0	100.0	

Source: Authors' elaboration with the research data

Figure 2. Anxiety and Sleep Disorders distribution

Source: Authors' elaboration with the research data

Comparing the study on the "Relationship between anxiety and motivation in high school students in Mexico" (Morales Escobar & Peralta Hernández, 2024) (Morales Escobar & Peralta Hernández, 2024) there is consistency in the findings that highlight the high prevalence of anxiety among students and its negative impact on academic performance, general well-being and additional problems such as sleep disorders and school rejection, with a more pronounced differential effect on females. Both studies suggest that intrinsic motivation could play a moderating role in the relationship between anxiety and performance, and highlight the need for interventions focused on anxiety management, the promotion of intrinsic motivation and adequate psychological support for students, in order to improve their well-being and academic performance.

The relationship with the study "Anxiety and self-esteem in adolescents in the city of Latacunga". (Bustos Chiriboga & Pinos Montenegro, 2023) the relationship between anxiety and mental health is clear in both studies, although it manifests itself in different ways depending on the context and population. In adolescents, anxiety impacts self-esteem and is associated with various socioeconomic and educational problems. In nursing students, anxiety directly affects sleep quality, which may have implications for their academic performance and general well-being.

Regarding the study "Association between anxiety and daytime sleepiness in medical students" (González et al., 2021) the relationship between anxiety and sleep disorders is evident in both studies, although it manifests itself in different ways depending on the context and population. In medical students, anxiety is closely linked to excessive daytime sleepiness, whereas in nursing students, anxiety affects overall sleep quality.

FINAL REMARKS

Research shows that anxiety can lead to more serious mental health problems, such as depression, post-traumatic stress disorder and suicidal ideation, significantly affecting personal and family quality of life. In the context of college students, the pressure to get good grades and meet academic expectations increases during exam periods, exacerbating anxiety levels.

In healthcare students, the prevalence of anxiety ranges from 19% to 43%. These students face high academic and clinical demands that not only impact their emotional well-being, but also their academic performance and development of critical clinical skills. Failure to adapt to these levels of anxiety can lead to feelings of burnout, devaluation, loss of interest and dehumanization, negatively affecting their professional future.

Continued exposure to stressful situations can trigger a range of emotional disorders, from anxiety to more serious conditions. Recognizing and properly managing these disorders early can significantly decrease the risk of psychological, social, and performance impairment in college students.

The relationship between anxiety and sleep disorders is evident and has a significant impact on students' mental health and academic performance. It is essential to implement psychological support programs and stress management

strategies to address these problems in a comprehensive manner, thus improving students' well-being and academic performance.

The *limitations* of the study were the scarce resources as current background, there was also a limitation in the sample taken since some of the students did not have internet within the institution and this made it difficult to complete the sample contemplated. It is *suggested* that this study be taken as a starting point for future research to students of all levels of the nursing career to make a comparison between semesters with more workload and students with less workload, such as the first semesters of the first levels.

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Contribution of each author to the manuscript:

Task	% of contribution of each author	
	A1	A2
A. theoretical and conceptual foundations and problematization:	50%	50%
B. data research and statistical analysis:	50%	50%
C. elaboration of figures and tables:	50%	50%
D. drafting, reviewing and writing of the text:	50%	50%
E. selection of bibliographical references	50%	50%
F. Other (please indicate)	-	-

Indication of conflict of interest:

There is no conflict of interest

Source of funding

There is no source of funding

Acknowledgments

There is no acknowledgment