

# Presence of Anxiety and Depression Symptoms in Students from a Private University in Chillán

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## Abstract

**Objectives:** To determine the presence of anxiety and depression symptoms in students at a private university in Chillán.

**Methods:** Descriptive cross-sectional study. The sample consisted of 166 university students. A sociodemographic and academic performance questionnaire, along with the Goldberg Anxiety and Depression Scale, was administered after obtaining informed consent and authorization from the University's Scientific Ethics Committee. For statistical analysis, absolute frequencies and pivot tables in Microsoft Excel were used.

**Results:** 85.5% of the participants were women, 85% were between 18 and 25 years old, and 45.1% of the students had failed a subject. 95.7% of the students presented anxiety symptoms, and 98.7% showed symptoms of depression.

**Conclusions:** Anxiety and depression symptoms were found among the students, with no significant difference in the percentages between those who failed subjects and those who did not.

**Keywords:** Anxiety; depression; students.

## Resumen

**Objetivos:** determinar la presencia de síntomas de ansiedad y depresión en estudiantes de una universidad privada en Chillán.

**Métodos:** se realizó un estudio descriptivo de corte transversal. La muestra incluyó a 166 estudiantes universitarios, a quienes se les aplicó un cuestionario sociodemográfico y de rendimiento académico, además de la Escala de Ansiedad y Depresión de Goldberg, previa firma del consentimiento informado y aprobación del Comité Ético Científico de la universidad. Para el análisis estadístico, se emplearon frecuencias absolutas y tablas dinámicas en Microsoft Excel.

**Resultados:** El 85,5 % de los participantes fueron mujeres, un 85 % tenía entre 18 y 25 años, y el 45,1 % de los estudiantes había reprobado al menos una asignatura. El 95,7 % de los estudiantes presentó sintomatología de ansiedad, mientras que un 98,7 % presentó síntomas de depresión.

**Palabras claves:** ansiedad, depresión, estudiantes.

## Introduction

According to reports from the Ministry of Education of Chile, in 2021, 1,204,414 students entered higher education, the highest figure on record. Regarding the most preferred fields of study, a 14.2% increase was observed in the health sector (1). This group of undergraduate university students is in the late adolescence stage, a period during which mental health issues such as mood disorders and anxiety disorders tend to emerge with particular intensity (2).

The high demand posed by academic challenges forces students to use all their physical and psychological resources (3). University education is a factor associated with mental health disorders due to the overload students face from the high demands of academic hours (4).

Among the most common mental health disorders in the general population is anxiety, probably the most common and universal emotion throughout human life. This disorder is manifested by reactions such as nervousness, insecurity, distress, restlessness, fear, or dread, inherent to different contexts (5). From a physiological perspective, anxiety is defined as a system that alerts the body to events that could put it at a disadvantage (6).

Some studies in nursing students report that anxiety is most commonly associated with academic stressors such as overload, exam presentations, lack of time, and coping styles. These coping styles include problem-solving,

positive thinking, task planning, self-confidence, and social support (7).

The effects of anxiety on academic performance have been described, and characteristics of the system that can provoke or exacerbate anxiety have been analyzed, increasing the number of students at risk of poor performance and academic failure (8). In a study conducted with nursing students, it was found that high trait anxiety scores, dissatisfaction with sleep, and younger age were significant predictors of exam anxiety. The same study found that women experience higher levels of exam anxiety than men (9).

Another relevant disorder is depression. According to the World Health Organization (WHO), 2.8% of young people between the ages of 15 and 19 suffer from depression (10). In the case of Chile, 5% of the population over 15 years old experiences depression, while more than a million people suffer from anxiety (6.5%) (11).

Depression can also occur in this age group. It is a disease characterized by persistent sadness, loss of interest in activities that are normally enjoyed, and the inability to carry out daily activities for at least two weeks (12).

In the university setting, one of the main factors associated with depression is academic stress, which acts as both a trigger and a perpetuating factor of the disease. A study has shown that students experienced a significant increase in depression levels, obsessive symptoms, and concentration loss after six weeks of being at university. This academic environment demands outstanding performance to achieve success, which involves an adaptation process that can generate stress (13).

The prevalence of depression reported by multiple studies conducted in university populations ranges between 25% and 50%, a figure that varies partly due to the different instruments used for its measurement (14).

Given the above, the aim of this study was to determine the presence of anxiety and depression symptoms in students from a private university in Chillán.

## **Materials and Methods**

This study is quantitative in nature, with a descriptive cross-sectional design.

The population consisted of students from the Nursing, Nutrition, Obstetrics, and Childcare programs at a private university in Chillán. A non-probabilistic convenience sampling method was used. The sample size was calculated with a 95% confidence level and a 6.7% margin of error, selecting a total of 166 participants who met the eligibility criteria of the

study. These criteria included that the students were enrolled from their first to fourth year of university and were pursuing a degree related to the health field. Students who did not sign the informed consent or left the survey incomplete were excluded.

To sociodemographically characterize the sample, a questionnaire developed by the authors of the study was used.

To identify the level of the study variables, the Goldberg Anxiety and Depression Scale (EADG) was applied, a tool that measures the presence of anxiety and depression symptoms in the adult population. This scale evaluates two factors:

1. **Psychological well-being** (Mental health): associated with positive emotions, a general sense of well-being, and its psychophysiological expression. It consists of six items (1, 2, 5, 7, 9, 12).

2. **Social functioning**: related to the individual's ability to face difficulties, make timely decisions, and positively self-evaluate. It consists of six items. (3, 4, 6, 8, 10, 11).

Both subscales allow for the detection of the presence or absence of mental health symptoms and have a reliability in both dimensions greater than 0.80.

The questionnaires were reviewed by a group of experts to assess their consistency and make necessary adjustments for readability.

Students were invited to participate through a Google Forms questionnaire, sent to their institutional emails after receiving authorization from the school directors.

To describe the study variables, which were quantitative, absolute and relative frequencies (percentages) were calculated using the Pivot Tables tool in Microsoft Excel.

The study was authorized by the Scientific Ethical Committee of the Adventist University of Chile (UNACH) under certificate CED N° 2022-68, issued on September 28, 2022. Each participant was asked to sign the informed consent, which was integrated as an option ("yes") in the questionnaire annex in Google Forms.

## Results

The sample consisted of 166 students, 85.5% of whom were women. 44.5% of the participants were between 18 and 21 years old, the same percentage as those in the 22 to 25-year age range. Regarding the majors, 28.1% were in the Nutrition program, 32.5% in the Obstetrics and Puericul-

ture program, and 39.7% in the Nursing program. Fourth-year students represented 39.7% of the sample. Additionally, 45.1% of the students reported having failed at least one subject. Table 1 shows that 95.7% of the students who participated in the study presented symptoms of anxiety, while 98.7% reported symptoms of depression.

**Table 1.** Presence of Anxiety and Depression Symptoms in Health Sciences Students from a Private University in Chillán

Anxiety and depression variables		n	Percentage (%)
Symptoms	Anxiety	159	95,7
	Normal	7	4,2
	Depression	164	98,7
	Normal	2	1,2
Total		166	100

\*Own Elaboration.

Table 2 shows that among students who had failed subjects, 43.9% presented anxiety symptoms, compared to 51.8% of students who had not failed any subjects. On the other hand, the presence of depressive symptoms was 54.2% in those who had failed subjects, while it was 44.5% among those who had not.

**Table 2.** Presence of Anxiety and Depression Symptoms Compared with Academic Performance of Students from a Private University in Chillán

Variables		n=166	Percentage (%)
Failed subjects	Anxiety	73	43,9
	Normal	2	1,2
Subjects not failed	Anxiety	86	51,8
	Normal	7	4,2
Failed subjects	Depression	90	54,2
	Normal	1	0,6
Subjects not failed	Depression	74	44,5
	Normal	1	0,6

\*Own Elaboration.

## Discussion

It can be observed that, in terms of sex, the study showed a greater participation of women, representing 85.5%. Regarding the age group, the distribution was homogeneous between the ranges of 18–21 and 22–25

years, both accounting for 44.5% of the sample, while those over 26 years represented 10.8%. The Nursing program had the highest response rate to the instrument applied, with 39.7%, whereas Nutrition had the lowest participation, with 28.1%. According to the Goldberg Anxiety and Depression Scale (GADS), 98.7% of the respondents presented symptoms of depression and 95.7% showed symptoms of anxiety.

In a similar study conducted in Colombia in 2020, it was found that 80.3% of the studied population suffered from depression, with no significant differences between the academic programs evaluated, which is similar to the results of this study (15). On the other hand, a study carried out in Asia reported depressive symptoms in 69.9% of participants (16).

In the same Colombian study, anxiety was present in half of the health sciences students and in 62.5% of medical students (15). Other authors have pointed out that, among students from various university programs also assessed using the GADS, the frequency of anxiety symptoms was 76.2% (17). Similarly, another study reported 30.15% of depression and 26.5% of anxiety (18).

In Chile, a study indicated that 36% of Nursing students exhibited a level of symptoms suggestive of a probable mental health problem (19). In another investigation carried out at a public university in southern Chile, anxiety was present in 53.2% of students, while depression affected 29%, results that differ from those obtained in this study, where the level of anxiety reached 95.7% (20). In comparison, participants in those investigations tended to experience fewer symptoms of anxiety and depression. However, it is important to note that this evidence does not constitute a diagnosis, although it suggests that a high percentage of students present pathological levels.

Each geographical region has its own rates of depression among students, with wide-ranging values even in studies conducted within the same country or in different countries with similar sociocultural conditions (21,22,23). In light of this evidence, it is necessary to analyze the relationship between depression and academic performance. Increased stress levels due to academic stressors generate a higher risk of depression among students (24).

This research determined that there are no significant differences in anxiety and depression symptoms between students who pass and those who fail subjects. This contrasts with another study that concluded that 92.9% of students with depression experienced academic problems (3). Some studies

have concluded that there is a significant relationship between academic performance levels and anxiety levels (25). Other authors found results similar to those of this research, as 69% of the evaluated students had good or high academic performance and still presented anxiety symptoms (15).

## Conclusion

The data analysis reveals an alarming prevalence of symptoms of anxiety and depression among students at a private university in Chillán. This high incidence of mental health issues highlights the urgent need to implement effective interventions within the university environment. The data also show a complex relationship between academic performance and depressive symptoms, with 54.2% of students who had failed subjects presenting symptoms of depression.

These findings underscore the relevance of nursing in the identification and management of mental health problems in educational settings. Nursing professionals can play a crucial role in early detection, providing psychological support, and promoting self-care strategies among students. They can also collaborate with other health professionals to design mental wellness programs that include both preventive measures and therapeutic interventions.

Future research should explore in greater depth the underlying causes of the high prevalence of anxiety and depression among university students, as well as the effectiveness of different mental health intervention strategies. It would also be valuable to investigate the impact of factors such as academic workload, social support, and lifestyle habits on the mental health of this population.

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