

ORIGINAL ARTICLE

Night eating syndrome among university students: are aspects of academic life associated with eating disorders?

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Abstract

Introduction: the critical period in the lives of college adults implies lifestyle changes such as reducing physical activity and adopting unhealthy eating habits that can result in increased body fat. Thus, college students may represent a population at increased risk for Night Eating Syndrome.

Objective: to analyze aspects of university students' academic life, work and housing that could be associated with Night Eating Syndrome.

Methods: cross-sectional study carried out with 900 students from Architecture, Engineering, Medicine and Psychology courses at a higher education institution located in Cajazeiras, Paraíba, Brazil. Self-administered questionnaires were used for data collection: the Night Eating instrument Questionnaire (NEQ) to quantify Night Eating Syndrome (NES) behaviors and a form for variables on demographic, health, academic life, work and housing aspects.

Results: the prevalence of NES determined by the $NEQ \geq 25$ score was 16.8%. In the Engineering course, the prevalence of NES was higher in women than in men, and in the Psychology course, it was higher in men than in women. Among students with a job and who lived at home, the prevalence of the syndrome was higher for those who worked in the afternoon and lower for those who worked at night.

Conclusion: the prevalence of NES found among Brazilian university students was high (16.8%), particularly in two situations: (1) being enrolled in an undergraduate course with a predominance of students of the other sex; and (2) live with parents and work in the afternoon. These observations may be helpful in identifying subpopulations of students at increased risk for eating disorders.

Keywords: Night Eating Syndrome, night eating questionnaire, students, young adult, University education.

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Authors summary

Why was this study done?

This research investigated aspects of the academic, working, and living lives of college students that could be associated with Night Eating Syndrome.

What did the researchers do and find?

In this cross-sectional study with college students from a private Brazilian institution, the prevalence of Night Eating Syndrome was high (16.8%). Predominantly, two situations drew the researchers' attention: (1) being enrolled in an undergraduate course with a predominance of students of the other sex; and (2) living with parents and working in the afternoon.

What do these findings mean?

These findings may be useful in identifying subpopulations of students at increased risk for eating disorders, especially in early adulthood.

INTRODUCTION

The Night Eating Syndrome (NES) was, in the 1950s, characterized by a triad of symptoms - absence of hunger in the morning, hyperphagia at night, insomnia - that occur associated with specific stressful events¹. Years later, anxiety, depressed mood that worsens at night, and waking up at night to eat were added to the syndrome's components². In physiological terms, there is a mismatch in the circadian rhythm of secretion of several hormones involved in appetite and sleep control in NES³. This imbalance results in difficulty sleeping and an abnormal eating pattern, with excessive food intake after dinner hours - 25% or more of total daily calories. As a result of this inadequate diet, many scholars investigate whether there is an association between NES and increased Body Mass Index (BMI)⁴, but the results in the literature are still not a consensus⁵.

SCN carriers report that the appearance of the first symptoms of this syndrome occurred mainly between late adolescence and early adulthood^{6,7}. This study focuses on the critical period in the lives of college adults, whose lifestyle changes such as decreasing physical activity and adopting unhealthy eating habits can, in addition to result in increased body fat^{8,9}, persist throughout life¹⁰, with great harm to health.

In this context, Night Eating Syndrome stands out as an eating disorder that can affect university students. The proportion of students who meet the screening criteria for the syndrome varies between 1.2 and 15% in studies from different countries including Brazil¹¹⁻²³, with a higher prevalence among obese individuals²⁴. It is known that obese individuals at 25 years of age are more likely to develop, ten years later, severe forms of obesity and metabolic alterations related to chronic diseases²⁵.

Most university students are in an age group and, therefore, in a stage of life that makes them more vulnerable to NES. In general, young adults (18 to 30 years old) have the highest food consumption after 11 pm compared to other ages²⁶. Psychological factors may also play a role in the outcome of this eating disorder. Students face psychological distress due to the difficulties of transitioning to adulthood and the trials of everyday academic life²⁷. It is known that emotional changes are important components of the set of symptoms of NES²⁸, and this association with the syndrome was confirmed among university students^{17,18,29,30}. Finally, it is common to find sleep disorders in this population³¹, another pillar

of the syndrome. Thus, there is a concern to identify and characterize the unhealthy behaviors of university students in order to plan specific strategies for health promotion and the prevention of serious diseases associated with excess weight⁹.

Some additional factors that could interfere with eating, sleeping and the emotional state of students, and therefore with the probability of developing NES, have been less explored in the literature: class schedule, simultaneous employment and the arrangement housing for example. The activity of students at night, either for classes or for work; the double journey of study and work, with accumulation of responsibilities related to academic and professional performance; and moving away from the parents' home, which could represent a loss of reference to the family pattern and a favorable situation for the disorganization of the daily routine, are variables that the authors intend to investigate in this research.

Thus, the present study aimed to analyze aspects of university students' academic life, work and housing that could be associated with Night Eating Syndrome.

METHODS

Study design

This is a cross-sectional observational study.

Place and period of study

Data were collected from university students from a private educational institution located in the city of Cajazeiras, State of Paraíba, Brazil, between September 2019 and March 2020.

Study population and eligibility criteria

In 2019, the institution had 2,667 students enrolled in 11 undergraduate courses. For this research, four courses were chosen: Architecture, Engineering, Psychology (duration of 5 years each), offered on a part-time basis in the morning and evening periods, and Medicine (duration of 6 years) offered on a full-time basis. At the beginning of data collection, these courses had a total of 1,333 students enrolled. Only students who were duly enrolled and aged over 18 years were included.

A sample size of 461 subjects was calculated to estimate the proportion of occurrence of the outcome night eating in 50% of the population (with an addition of 20% for possible losses and refusals). The calculation

(using the Wald method) considered a confidence level of 95%³², seeking to obtain the largest number of participants from the four chosen courses.

Data collect

Initially, a previous conversation was held with the teacher present in the room at the time of collection and permission was requested to use approximately 15 minutes of his class. After that, the researcher presented the students with the research, its objectives, methods, risks, benefits and the Informed Consent Form (ICF), emphasizing that participation would be completely voluntary.

The participants signed the ICF and started filling out the questionnaire and the form, which were delivered by the researcher in charge of this study, in their own desks in the classroom.

For data collection, two questionnaires were self-administered: the Night Eating instrument Questionnaire (NEQ)³³, a widely used tool to screen and assess the severity of NES, and a form specific to this study to obtain participant information that was necessary for the study.

The NEQ is a questionnaire for quantifying SCN behaviors, being an instrument for screening the syndrome and quantifying its symptoms³⁴. In Brazil, three different versions of the NEQ were validated. This study used the first published version³³. The two versions subsequently produced were intended to adapt the questionnaire for specific populations: for adults with less schooling³⁵ and for adolescents³⁶. As the participants in this study were attending higher education and had already left adolescence, these versions would not be suitable for this research.

The NEQ version validated in Brazilian Portuguese was used, which contains 14 questions with five possible answers on a Likert scale from 0 to 4 points³³. The sum of all scored questions originates the NEQ score, which has a maximum value of 56 points. A NEQ score greater than or equal to 25 was used as a criterion for determining the prevalence of Night Eating Syndrome³⁷. Another cutoff point (NEQ \geq 30) was also used in some analyzes for greater specificity of SCN determination³⁷.

Participants additionally completed the form on demographic, health, academic life, work and housing aspects. Information on gender, age, weight and height was requested to calculate the body mass index (BMI), course in which they are enrolled, period and year. It was also asked if the student worked, at what time of the day and for how many hours a day. About the period of work, the possible answers were: morning; afternoon; night; morning and afternoon; or another separate period. Regarding the number of hours of daily work, students who worked were divided into four groups: up to 4 hours of work per day; 4 and 8 hours a day; 12 hours a day; or 24 hours straight. The last two groups considered the possibility of working on an on-call basis. Regarding the housing variable, they were asked if they lived at their parents' house with the alternatives "yes" or "no". Those who answered that they did not live with their parents were asked to inform whether they lived alone, with friends or with a partner.

As they are self-administered and self-explanatory, the questionnaires minimized the possibility of embarrassment due to the participant's exposure at the time of data collection. The questionnaires were distributed by the first author of this manuscript, who was available to clarify any doubts.

Over 7 months of collection, 920 questionnaires were obtained, of which 20 questionnaires were excluded due to their age being less than 18 years old. Thus, the final sample consisted of 900 participants, representing 67.5% of all students enrolled in the four courses selected for this study. All academic semesters of the four courses were included in the final sample, with percentages varying between 50 and 75% in relation to the total enrollment.

Data analysis

The variables that made up the profile of the studied population (gender, course, year of course, period of study, work, period of work, categories of hours worked per day, whether or not they live at their parents' house) were analyzed using absolute frequencies and relative. Quantitative variables (age, body mass index and NEQ score), as they did not adhere to normal distribution, were presented as medians and 25th and 75% percentiles. The Shapiro-Wilk test was used to assess the adherence of quantitative variables to normal distribution. To analyze the association between qualitative variables and SCN, the Chi-square test was used, and to analyze the association between quantitative variables and SCN, the Mann-Whitney test was used. The significance level adopted was 95%. The program used was Stata® (StataCorp, LC) version 11.0³⁸.

Ethical aspects of legal research

The research followed the precepts of national and international guidelines for investigations involving human beings, particularly Resolution n° 466/2012 on regulatory standards for research involving human beings³⁹ and was approved by the Research Ethics Committee of the Faculdade Santa Maria/Paraíba, under opinion number 3.550.266 and Certificate of Presentation of Ethical Appreciation (CAAE 16597519.2.0000.5180).

RESULTS

Nine hundred university students from four courses offered by the analyzed higher education institution were evaluated: Architecture, Engineering, Medicine and Psychology (table 1). The percentage distribution of participating students among courses, academic semester of the course and academic year of the course approximately reflected the proportion of those enrolled at the beginning of data collection. The course with the highest adherence to the survey was Psychology with 75.7% (215 among 284 enrolled) and the course with the lowest proportion was Engineering with 53.2% (177 among 333 enrolled). In relation to the years and periods of the four courses, the percentages of adherence varied between 50 and 75% in relation to the total number of enrolled students.

Participants were mostly female (53.7%) and the median age was 22 years. As for the Body Mass Index

Table 1: Sociodemographic characteristics of 900 university students from a private educational institution. Cajazeiras/Paraíba – 2020

Variables		N (%) or Median and (CI95%)	
Demographics	Sex	Masculine	417 (46.3%)
		Feminine	483 (53.7%)
Health	Age years)		22 (18-34)
	BMI (kg/m2)		23.5 (18.5-31.4)
	NEQ score		19 (12-31)
	Night Eating Syndrome	NEQ≥25	151 (16.8%)
NEQ≥30		60 (6.67%)	
Academic life	Course	Architecture	195 (21.7%)
		Engineering	177 (19.7%)
		Medicine	313 (34.8%)
		Psychology	215 (23.9%)
	academic year of the course	1st	183 (20.3%)
		2nd	172 (19.1%)
		3rd	203 (22.6%)
		4th	193 (21.4%)
		5th	95 (10.6%)
		6th	54 (6.0%)
		period of study	morning
nocturnal	397 (44.1%)		
Work	have a job	Full	312 (34.7%)
			285 (31.7%)
	Work time	Morning	49 (17.2%)
		Afternoon	52 (18.3%)
		Night	28 (9.8%)
		Morning and afternoon	127 (44.6%)
		Others*	29 (10.2%)
	Working hours per day	Up to 4 hours	93 (32.6%)
		From 4 to 8 hours	155 (54.4%)
		12 noon	27 (9.5%)
24 hours		10 (3.5%)	
Home	Lives away from parents' house		462 (51.3%)
	If you don't live with your parents, who do you live with?	Alone	157 (34%)
		Friends partner	214 (46.3%) 91 (19.7%)

BMI: Body Mass Index; NEQ: Night Eating questionnaire.

*Others: Afternoon and night or Morning, afternoon and night.

(BMI), the median found was 23.5 kg/m². The median value of the NEQ score for all subjects was 19. Of the 900 participants, 151 had an NEQ score greater than or equal to 25, resulting in a prevalence of 16.8% of NES. Sixty students (6.67%) achieved a NEQ score equal to or greater than 30. As for the job variable, 31.7% of the students reported having a job. Among these students, the majority worked for 4 to 8 hours a day (54.4%) and in the morning and afternoon shift (44.6%). Regarding housing, 51.3% of university students reported that they did not live with their parents and of these, 46.3% said they lived with friends.

The NEQ score and the prevalence of NES (by the NEQ \geq 25 criterion) were analyzed according to the study variables (Table 2). Among students with a job, it was noted that the prevalence of NES was higher for those who work in the afternoon and lower for those who work at night (p=0.031). No statistically significant association was found between the prevalence of the syndrome for

the other variables. Regarding the NEQ score of college students, there was no statistically significant association. It is noteworthy, however, that NEQ score comparisons for some variables were close to the limit of significance: women tended to score higher than men (p=0.053); there was a trend towards differences in scores between courses (p=0.078), working students tended towards lower scores (p=0.086). These trends motivated the search for associations between subgroups of the sample.

Comparisons of the prevalence of NES between men and women were performed according to some of the study variables (Table 3). In the Engineering course, the proportion of students reaching the SNC criterion was higher for females (p=0.007). In the Psychology course, the opposite occurred: the proportion of students reaching the SNC criterion was higher for males (p=0.035). It is noteworthy that in the Engineering course there was a predominance of enrolled men (76.3%) and in the

Table 2: score NEQ and prevalence of Night Eating Syndrome (NEQ \geq 25), according to characteristics of university students at a private educational institution. Cajazeiras/Paraíba – 2020

VARIABLE		NEQ score* Median (CI95%)	p	NEQ \geq 25 N (%)	p
Sex	Masculine	19 (18-20)	0.053	66 (15.8%)	0.478
	Feminine	20 (19-20)		85 (17.6%)	
Course	Architecture	20 (19-20)	0.078	29 (14.9%)	0.626
	Engineering	19 (18-20)		29 (16.4%)	
	Medicine	19 (18-20)		51 (16.3%)	
	Psychology	21 (20-22)		42 (19.4%)	
Course (school) year	1st	19 (18-20)	0.974	29 (15.8%)	0.863
	2nd	20 (18.6-20.3)		27 (15.7%)	
	3rd	19 (19-21)		39 (19.2%)	
	4th	20 (19-20)		33 (17.1%)	
	5th	20 (18-22)		13 (13.7%)	
	6th	19 (18-21.7)		10 (18.5%)	
period of study	morning	20 (19-21)	0.134	32 (16.8%)	0.962
	nocturnal	20 (19-21)		68 (17.1%)	
	Full	19 (18-20)		51 (16.34%)	
It works	No	20 (19-20)	0.086	106 (17.2%)	0.589
	Yes	19 (18-20)		45 (15.8%)	
Work time	Morning	20 (17-22)	0.087	6 (12.2%)	0.031
	Afternoon	20 (18-22.6)		16 (30.8%)	
	Night	16 (14-20)		2 (7.1%)	
	Morning and afternoon	19 (18-20)		16 (12.6%)	
	Others	19 (16.7-22)		5 (17.2%)	
Working hours per day	Up to 4 hours	19 (18-20)	0.705	16 (17.20%)	0.676
	From 4 to 8 hours	19 (18.7-20.2)		22 (14.2%)	
	12 noon	17 (15.9-20.1)		6 (22.2%)	
	24 hours	17 (14.3-23.3)		1 (10%)	
Lives away from parents' house	No	19 (19-20)	0.588	68 (15.5%)	0.327

Continuation - Table 2: score NEQ and prevalence of Night Eating Syndrome (NEQ≥25), according to characteristics of university students at a private educational institution. Cajazeiras/Paraíba – 2020

VARIABLE		NEQ score* Median (CI95%)	p	NEQ ≥25 N (%)	p
If you don't live with your parents, who do you live with?	Yes	20 (19-20)	0.964	83 (18%)	0.873
	Alone	19 (18-21)		27 (17.2%)	
	Friends	20 (19-21)		38 (17.8%)	
	partner	20 (18-21)		18 (19.8%)	

NEQ: Night Eating Questionnaire.

Psychology course there was a predominance of women enrolled (79.1%). In the other two courses, the number of women enrolled was higher (50.8% in Architecture and 55.2% in Medicine), but the distribution of enrollments by gender was more balanced. No statistically significant association was found when comparing the prevalence of NES between men and women for the other variables surveyed (period of study, work, period of work and whether or not they live at their parents' house).

The prevalence of the syndrome in students who

live with their parents and those who do not live with their parents was also compared according to the study variables (table 4). It was possible to observe that the differences in the prevalence of NES for students who work in the afternoon and at night that were verified in the complete universe of the study are maintained for the subgroup that lives with their parents ($p=0.026$), but do not have statistical significance for the subgroup of students who do not live with their parents. No other significant differences were identified for this type of comparison.

Table 3. Comparison of the prevalence of Night Eating Syndrome (NEQ≥25) between men and women, according to characteristics of university students. Cajazeiras/Paraíba – 2020

VARIABLE		NEQ≥25		p
		Masculine (%)	Feminine (%)	
Course	Architecture	13.5	16.2	0.689
	Engineering	11.9	31.0	0.007
	Medicine	16.3	16.3	>0.999
	Psychology	31.1	16.5	0.035
period of study	morning	18.0	16.2	0.836
	nocturnal	14.8	19.9	0.185
	full	16.4	16.3	>0.999
It works	No	16.3	17.9	0.663
	Yes	15.2	16.7	0.743
Work time	Morning	15.4	8.70	0.671
	Afternoon	27.6	34.8	0.763
	Night	5.6	10.0	>0.999
	Morning and afternoon	10.5	15.7	0.423
	Others	22.7	0.00	0.296
Lives away from parents' house	No	14.7	20.5	0.114
	Yes	16.9	14.2	0.510

NEQ: Night Eating questionnaire.

Table 4: Comparison of the prevalence of Night Eating Syndrome (NEQ \geq 25) only among students who live away from their parents' home (n=462) or only among students who live at their parents' home (n=438), according to characteristics of the College students. Cajazeiras/Paraíba – 2020

VARIABLE		NEQ \geq 25			
		Only students who live outside their parents' home (%)	p	Only students living at home (%)	p
Course	Architecture	17.7	0.890	13.5	0.515
	Engineering	16.7		16.2	
	Medicine	17.4		10.9	
	Psychology	21.1		18.7	
period of study	morning	18.6	0.957	15.7	0.645
	nocturnal	18.5		16.4	
	full	17.5		10.9	
It works	No	19.2	0.275	14.8	0.587
	Yes	14.5		16.8	
Work time	Morning	17.7	0.769	9.4	0.026
	Afternoon	23.5		34.3	
	Night	10.0		0.0	
	Morning and afternoon	12.2		12.8	
	Others	14.3		25.0	

DISCUSSION

In the higher education institution analyzed, the proportion of students reaching the SCN screening criteria was 16.8%, or approximately 1 in every 6 participants. This proportion stands out as the highest prevalence among findings in the scientific literature for university student populations in different countries, whose data were collected before 2020¹¹⁻²³. Some of these studies exclude students who show evidence of binge eating disorders (eg¹²), reducing the prevalence rate. In the present study, other eating disorders were not investigated.

Data available in the literature suggest that the prevalence of NES in university students may be higher in some countries such as Turkey, Saudi Arabia, Malaysia, Brazil and China, where values of 9.5% to 15.0% were verified^{15,17,20-22}. The result found in this study is closer to this variation range. In the other countries, the prevalence of SCN among university students varied at a lower level, between 1.2 and 5.8%^{11-14,20}. It is possible to speculate that cultural, socioeconomic and educational system differences explain the disparities between countries in relation to the estimated prevalence of SCN in students. Another hypothesis to be considered would be some level of variation in the results obtained by the NEQ versions in different languages.

Among the participating students, there was a trend towards a higher NEQ score for women. When investigating this question in more detail, differences in the prevalence of SCN between genders were found that were related to the course in which the student was enrolled. In the Engineering course, the prevalence of SCN was higher among women, consistent with the trend towards higher NEQ scores for this gender. However, unexpectedly,

in the Psychology course it was found that men had a higher prevalence of SCN. This point contrasts, in the two courses, the number of students enrolled in each of them, the Engineering course being mostly male, and the Psychology course mostly female. The higher prevalence of the syndrome in both cases could be associated with the discomfort of belonging to a minority. Despite society's evolution towards reducing sexual segregation in the social and professional field, in higher education some areas still persist as predominantly female or male^{40,41}. The collision between the contemporary ideal of equality between the sexes and the realization of the existence of environments dominated by one of the sexes at the university could generate a particularly stressful conflict for the minority group.

Two hundred and eighty five working students were identified, corresponding to 31.7% of the participants. Worldwide, a relevant fraction of higher education students perform paid work during graduation⁴²⁻⁵⁰. This university student's work usually aims to pay for his personal expenses, his housing and his studies. The possible implications of working while attending classes are discussed at length. The daily journey extended by the sum of periods of study and work can interfere with health. Research shows that college students who work have worse sleep quality than their peers who don't study, with an increased risk of sleep deprivation and sleep disturbances^{45,46,48,49}. Increased fatigue and reduced physical activity are also noted^{46,48}. In addition, several articles point to impaired academic performance of working students^{42-44,47,50}.

In this research, working students presented a distribution of NEQ scores that were close to statistically

different from non-working students. However, the trend found was a lower NEQ score for working students. A similar result had been observed by our group in another sample of Brazilian students¹⁷. The eventual reduction of the NEQ score among working students, if confirmed, would contest the suspicion that working simultaneously with the study could favor the NES. Such preliminary evidence can be interpreted as indications that there is a more complex relationship between student work and signs of SCN. Aspects of the students' work that reinforce the behaviors of the syndrome would coexist with aspects of opposite effect, attenuating the syndrome. The first step to verify the adequacy of this hypothesis would be to identify interfering cofactors.

It was found that the students' living arrangements and working hours could be some of these cofactors. Among students who live with their parents, the prevalence of SCN was higher among those who worked in the afternoon and lower among students who worked at night. The implications of housing and work hours on SCN that were found are intriguing. Based on the related literature, it would be reasonable to expect the opposite: a higher prevalence of the syndrome among students who work at night and that this effect would be more pronounced among those who do not live at home. Regarding the workday, when it goes beyond bedtime, it can cause overweight and obesity due to changes in eating patterns^{51,52}. Regarding housing, when students leave the family home, their eating habits become less healthy^{53,54}. The results of this study point to relationships between work, housing and SCN among university students that apparently do not fit into a simple model. New studies will be needed to better clarify these relationships.

The present study presented as main limitations: the use of information obtained from self-administered questionnaires that may have intrinsic biases in the

understanding of the questions and partiality in the answers of the interviewees; the lack of investigation of other eating disorders; the inclusion of participants from a single higher education institution; and the cross-sectional design that does not allow establishing causal relationships between the studied phenomena. Finally, the cultural and social context of Brazil, as well as its structure of higher education, present peculiar characteristics, and it is not possible to extrapolate a priori the interpretation of the results of this research to students from other countries.

In conclusion, the prevalence of NES found among Brazilian university students was high (16.8%), particularly in two situations: (1) being enrolled in an undergraduate course with a predominance of students of the other sex; and (2) live with parents and work in the afternoon. These observations may be helpful in identifying subpopulations of students at increased risk for eating disorders.

Author Contributions

All authors contributed to the manuscript. Dandara Dias Cavalcante Abreu: Participated in data collection, data analysis, statistical analysis and writing of the text. Janaina Paula Costa da Silva: Participated in the discussion of results and final version of the text. Laércio da Silva Paiva: Participated in the study design, statistical analysis, discussion of results and final version of the text. Francisco Winter dos Santos Figueiredo: Participated in the study design, statistical analysis, discussion of results and final version of the text. Ricardo Peres do Souto: Participated in the general orientation of the research, definition of the study design, statistical analysis, discussion of results and final version of the text.

Conflict of interests

Nothing to declare.

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Resumo

Introdução: o período crítico da vida de adultos universitários implica mudanças do estilo de vida como a diminuição da atividade física e a adoção de hábitos alimentares pouco saudáveis que podem resultar em aumento da gordura corporal. Assim, estudantes universitários podem representar uma população com risco aumentado para a Síndrome do Comer Noturno.

Objetivo: analisar aspectos da vida acadêmica, do trabalho e da moradia de estudantes universitários que poderiam se associar à Síndrome do Comer Noturno.

Método: estudo transversal realizado com 900 estudantes dos cursos de Arquitetura, Engenharia, Medicina e Psicologia de uma instituição de ensino superior localizada em Cajazeiras, Paraíba, Brasil. Para a coleta de dados foram usados questionários autoaplicados: o instrumento Night Eating Questionnaire (NEQ) para quantificar comportamentos da Síndrome do Comer Noturno (SCN) e um formulário para variáveis sobre aspectos demográficos, de saúde, vida acadêmica, trabalho e moradia.

Resultados: a prevalência da SCN determinada pelo escore $NEQ \geq 25$ foi 16,8%. No curso de Engenharia a prevalência da SCN foi maior nas mulheres em relação aos homens, e no curso de Psicologia, foi maior nos homens em relação as mulheres. Entre os estudantes com emprego e que moravam na casa dos pais, a prevalência da síndrome foi maior para aqueles que trabalham no período da tarde e menor para aqueles que trabalham à noite.

Conclusão: a prevalência da SCN encontrada entre os estudantes universitários brasileiros foi alta (16,8%), particularmente em duas situações: (1) estar matriculado um curso de graduação com predominância de estudantes do outro sexo; e (2) morar com os pais e trabalhar no período da tarde. Estas observações podem ser úteis na identificação de subpopulações de estudantes com risco aumentado de distúrbios de alimentação.

Palavras-chave: Síndrome do Comer Noturno; Night eating questionnaire; estudantes; adulto jovem; ensino superior.

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