

ORIGINAL ARTICLE

QUALITY OF LIFE OF NURSING TECHNICAL COURSE STUDENTS
QUALIDADE DE VIDA DE ESTUDANTES DO CURSO TÉCNICO EM ENFERMAGEM
CALIDAD DE VIDA DE ESTUDIANTES DE CURSO TÉCNICO DE ENFERMERÍA

Patrícia Silva Nunes¹, Tamiris Augusto Marinho², Fernanda Letícia da Silva Campanati³, Natielly Pryscilla Silva⁴,
Charlise Fortunato Pedroso⁵, Mariana Magalhães Nóbrega⁶, Rafael Alves Guimarães⁷

ABSTRACT

Objective: to investigate the quality of life of nursing technical students and the challenges associated with vocational training. **Method:** this is a quantitative, descriptive, observational, cross-sectional and analytical study with students from a federal educational institution. Data was collected using the WHOQOL-brief questionnaire and the form with complementary variables. In the bivariate analysis, the Student's t test and Pearson's correlation were used. Multiple linear regression analysis was performed to verify factors associated with quality of life scores ($p < 0.05$). **Results:** the study was composed by 165 students. In the social domain, the best average rating was evidenced and the worst one was the environment domain. Students were willing to drop out of the course with a lower average quality of life score in all domains, and those who reported difficulty in maintaining the course for financial reasons had lower scores in the physical ($p = 0.024$) and environmental domains. ($p < 0.001$). **Conclusion:** the worst quality of life was assessed among students with weaknesses in social and financial support networks, which may impact school performance and the risk of dropout. **Descriptors:** Quality of Life; Students, Nursing; Health Evaluation; Education; Nursing, Students, Health Occupations.

RESUMO

Objetivo: investigar a qualidade de vida de estudantes do curso técnico em enfermagem e os desafios associados à formação profissional. **Método:** trata-se de um estudo quantitativo, descritivo, observacional, transversal e analítico, com discentes de uma instituição federal de ensino. Coletaram-se os dados utilizando o questionário WHOQOL-breve e o formulário com variáveis complementares. Empregaram-se, na análise bivariada, o teste t de *student* e a correlação de Pearson. Realizou-se a análise de regressão linear múltipla para verificar os fatores associados aos escores de qualidade de vida ($p < 0,05$). **Resultados:** compôs-se o estudo por 165 discentes. Evidenciou-se, no domínio social, melhor avaliação média e a pior avaliação foi o domínio meio ambiente. Encontraram-se discentes com vontade de desistir do curso com escore médio de qualidade de vida menor em todos os domínios, sendo que aqueles que relataram dificuldade de se manter no curso por razões financeiras tiveram escores menores nos domínios físico ($p=0,024$) e ambiental ($p < 0,001$). **Conclusão:** aferiu-se a pior qualidade de vida entre discentes com fragilidades nas redes de apoio social e financeira, o que pode impactar o rendimento escolar e o risco de evasão. **Descritores:** Qualidade de Vida; Estudantes de Enfermagem; Avaliação em Saúde; Educação; Enfermagem; Estudantes de Ciências da Saúde.

RESUMEN

Objetivo: investigar la calidad de vida de los estudiantes técnicos de enfermería y los desafíos asociados con la formación profesional. **Método:** este es un estudio cuantitativo, descriptivo, observacional, transversal y analítico con estudiantes de una institución educativa federal. Los datos fueron recolectados utilizando el cuestionario breve WHOQOL y el formulario con variables complementarias. En el análisis bivariado, se utilizaron la prueba t de *Student* y la correlación de Pearson. Se realizó un análisis de regresión lineal múltiple para verificar los factores asociados con los puntajes de calidad de vida ($p < 0.05$). **Resultados:** el estudio estuvo compuesto por 165 estudiantes. En el dominio social, se evidenció la mejor calificación promedio y la peor fue el dominio del medio ambiente. Los estudiantes estaban dispuestos a abandonar el curso con un puntaje promedio de calidad de vida más bajo en todos los dominios, y aquellos que informaron dificultades para mantener el curso por razones financieras tuvieron puntajes más bajos en el dominio físico ($p = 0.024$) y ambiental ($p < 0,001$). **Conclusión:** se evaluó la peor calidad de vida entre los estudiantes con debilidades en las redes de apoyo social y financiero, lo que puede afectar el rendimiento escolar y el riesgo de abandono escolar. **Descriptor:** Calidad de Vida; Estudiantes de Enfermería; Evaluación en Salud; Educación; Enfermería; Estudiantes del Área de la Salud.

^{1,2,3,5,6}Federal Institute of Education, Science and Technology of Goiás / IFG. Goiânia (GO), Brazil. ¹<https://orcid.org/0000-0003-4163-9516> ²<https://orcid.org/0000-0001-8539-259X> ³<https://orcid.org/0000-0003-1044-7845> ⁵<https://orcid.org/0000-0001-6136-6485> ⁶<https://orcid.org/0000-0003-1880-7518> ⁴Federal University of Goiás / UFG. Goiânia (GO), Brazil. ⁴<https://orcid.org/0000-0003-0404-859X> ⁷<https://orcid.org/0000-0001-5171-7958>

How to cite this article

Nunes PS, Marinho TA, Campanati FLS, Silva NP, Pedroso CF, Nóbrega MM, et al. Quality of Life of Nursing Technical Students. J Nurs UFPE online. 2019;13:e242601 DOI: <https://doi.org/10.5205/1981-8963.2019.242601>

INTRODUCTION

It is known that the quality of life (QOL) of individuals has been discussed over the years as an important interfering factor in the daily life of biopsychosocial humans, influencing the type of aging and other aspects related to the complex process of human development. QOL has been used more frequently as a term in recent decades, although the search for meanings of this concept has been studied for several years.¹⁻²

It is understood that the advancement of technological development of industrial societies resulted in the need to change health paradigms, increasing the concern with the concept of QOL with the objective of overcoming the overvaluation of physiological parameters and adding the idea of subjectivity and multidimensionality of life dynamics.¹⁻³

According to the World Health Organization (WHO) in 1946, health is conceptualized as the “complete state of physical, mental and social well-being”, inferring that there are several social conditions in health that can influence individual's health-disease process and, consequently, their QOL.⁴⁻⁵

It is reported that the broadening of debates on health promotion policies in several countries motivated the WHO QOL study group to define it as: “the individual's perception of their position in life, according to the context and the value system with which they live and in relation to their objectives, expectations, standards and concerns” and to develop an instrument capable of assessing QOL with cross-cultural scope.⁶

It is believed that broader aspects of QoL assessment corroborate the broad concept of health and refer to the importance of understanding the subjective conditions and intervening factors that will favor or hinder the execution of activities of daily living of the individual. Despite the subjectivity that involves the individual perception of QOL and the psychometric difficulty in assessing this subject's life condition, studies on the subject using different measurement instruments have been conducted in different populations.⁷⁻⁹

It is believed that the context of QOL involving health professionals, especially the Nursing team, the main link of the health system with the user / patient, should be studied from the professional training process, since excellence in the qualification of this future worker permeates the psychosocial scenario experienced during the academic period. It was reported in results of research conducted with students, the relevant role of educational institutions in detecting difficulties experienced by them, aiming to broaden the discussion of the subject in the institutions, as well as propose strategies to support student education.⁹⁻¹¹

Nursing as a humanistic science, defended by Levine in 1967 in his Holistic Nursing Theory, brings, as theoretical support, the view of the profession in its biological, psychosocial, cultural and historical basis, envisaging the individual's understanding as a biopsychosocial being, a “whole with all its integrated parts” that lives in constant interaction with the environment.¹²

It is noteworthy that this concept of holistic nursing enables not only the broadening of the professional's perspective from the client's point of view, but also from the perspective of their education to health care.¹² The view of the individual as a whole is corroborated. educational context by Freire's pedagogical practice, which defends problematizing education as a movement that starts from “man-world” relations as historical beings that are.¹³ Thus, it is considered important that educational institutions understand the process of student formation in a holistic and critical way, perceiving their socio-environmental contexts as factors that may impact the QOL of these students and their academic performance, impacting on professional life.¹⁴

OBJECTIVE

- To investigate the quality of life of nursing technical students and the challenges associated with vocational training.

METHOD

This is a quantitative, descriptive, observational, cross-sectional and analytical study. All students of the Nursing Technician course, in the EJA modality, were included in the two health campuses of a federal educational institution named here A and B.

The students' QoL was evaluated using the Brazilian version of the WHOQOL-brief questionnaire, composed of 26 questions, two of them about general aspects of QoL (items 1 and 2 of the instrument) and 24 other questions divided into four domains: physical, psychological, social relations and environment. Each item is scored from one to five on a Likert-type scale. The scores were linearly transformed from zero to 100, with zero representing the worst QOL and 100 the best. In the data collection instrument, objective questions about sociodemographic characteristics, support network and perception of school performance were inserted.

Interested parties were asked to sign the Free and Informed Consent Term (FICT), and the data collection was performed by the researchers in June 2018, with a single-class intra-class approach, aiming at the lowest interference in the class period.

The following were considered for inclusion: adulthood, being properly enrolled in the course and being present at the time of collection. The exclusion criteria were the refusal to participate

in the research and not being present at the time of data collection.

Data was analyzed by the STATA program, version 14.0. In the descriptive analysis of the variables, the qualitative as absolute and relative frequencies (%) and the quantitative were presented in measures of central tendency, and the WHOQOL-brief domain scores are presented in a box plot graph. The reliability analysis of the instrument was performed by Cronbach's alpha and Intra-class Correlation Coefficient (ICC).

Factors associated with QOL domains were verified by performing bivariate and multiple analyzes. In the bivariate analysis, Student's t-test for independent samples was used to compare the domain means between the nominal qualitative variables. Pearson's correlation test (r) was used to verify the association between ordinal or quantitative qualitative variables and QOL domains.

This was followed by analysis with variables with p-value <0.20 in the bivariate analysis, and potential confounders (gender and age) were included in a multiple linear regression model. The models were evaluated for multicollinearity by the Variance Inflation Factor (VIF). Due to the absence of heteroscedasticity in all models, robust analysis

was used to correct standard errors and 95% CI. Values of p <0.05 were considered statistically significant.

The study complied with the determinations and norms established by the National Health Council, which was duly reviewed by the Ethics and Research Committee, via Plataforma Brasil, and authorized by an opinion approved by approval no. 2,556,555 / 2018, pursuant to Resolution 466/2012 of the National Health Council.

RESULTS

165 students participated in the study, representing 61.0% of the total students enrolled in the course, and they had an average age of 33.1 years (SD = 9.1; minimum: 18; maximum: 55); most were female (89.7%); 74.5% belonged to campus A; 55.8% said they were working; 68.5% reported difficulty in reconciling work and study routine; 66.7% already felt like giving up the course; 50.3% report financial difficulty as the main obstacle to stay in the course; 95.8% feel motivated to complete the course, and among the main motivators are the perspective of the professional (63.0%) market, followed by family (51.5%) and institutional (45.5%) support.

Table 1. Descriptive analysis of variables. Goiânia (GO), Brazil, 2018.

Variables	N = 165	%
Sex		
Female	148	89.7
Male	17	10.3
Campus		
A	123	74.5
B	42	25.5
Year of the course		
1	34	20.6
2	66	40.0
3	27	16.4
4	38	23.0
Works		
No	73	44.2
Yes	92	55.8
Difficulty in reconciling work and study (n = 92)		
No	29	31.5
Yes	63	68.5
Willingness to give up the course		
No	55	33.3
Yes	110	66.7
School performance self-assessment		
Bad	4	2.4
Regular	56	33.9
Good	91	55.2
Great	14	8.5
Learning disabilities in general high school subjects		
No difficulty	6	3.6
Little difficulty	57	34.5
Average difficulty	78	47.3
Great difficulty	21	12.7
Huge difficulty	3	1.8
Learning disability in specific Nursing disciplines		
No difficulty	12	7.3
Little difficulty	69	41.8
Average difficulty	72	43.6
Great difficulty	11	6.7
Huge difficulty	1	0.6
Has difficulty staying in the course		
No	5	3.0
Yes	160	97.0

Difficult factors to stay on course *		
Work routine	68	35.2
Subject Learning	56	33.9
Financial reasons	83	50.3
Family or personal reasons	48	29.1
Other reasons	18	10.9
Feel motivated to complete the course		
No	7	4.2
Yes	158	95.8
Motivating Factors for Course Completion *		
Family support	85	51.5
Institutional support	75	45.5
Professional market	104	63.0
Other reasons	13	7.9

* Question allowed the choice of more than one alternative.

Table 2 shows the analysis of the WHOQOL-brief domains. A higher score was found for the social domain (65.2); on the other hand, the environment domain had a worse average score (38.8).

The WHOQOL-brief instrument asked how students assessed their overall QOL. Results showed that 35.8% rated their QOL as good; 6.1%, very good; 47.3%, neither bad nor good; 8.5% poor

and 2.4% very poor (item 1 of the WHOQOL-brief instrument). It was investigated how the students qualified their health condition in the last fortnight. 30.9% of the students were satisfied; 8.4%, very satisfied; 31.5%, neither satisfied nor dissatisfied; 21.8%, dissatisfied and 7.3%, very dissatisfied (item 2 of the WHOQOL-brief instrument) - (data not shown in tables).

Table 2. Analysis of the domain score. Goiânia (GO), Brazil, 2018.

Domains	Average (SD)	CI 95%	Median	IIQ	Value	Alpha Cronbach*	ICC	p value**
Physical	59.8 (16.0)	57.4-62.3	60.7	48.2-71.4	10.7-96.4	0.700	0.690	< 0.001
Psychol.	62.3 (18.0)	59.6-65.1	62.5	50.0-75.0	16.7-95.5	0.741	0.741	< 0.001
Social	65.2 (22.2)	61.8-68.7	66.7	50.0-83.3	0.0-100.0	0.635	0.623	< 0.001
Environ.	38.8 (14.5)	36.5-41.0	37.5	28.1-50.0	6.3-90.6	0.730	0.722	< 0.001

Abbreviations: SD: Standard Deviation; 95% CI: 95% confidence interval; SD: standard deviation; IIQ: Interquartile range; Min: Minimum; Max: Maximum; ICC: intra-class correlation coefficient; * Standardized Cronbach's alpha; ** F test.

Table 3 shows the potential factors associated with QOL domains; No statistical difference was found between the mean scores for all domains regarding the variables sex and campus ($p > 0.05$); On the other hand, the average QoL scores in the environmental domain were statistically higher in the working students when compared to the non-working students ($p = 0.019$).

It is noteworthy that students who reported willingness to drop out had lower average QoL scores than those who did not report this characteristic for all domains: physical ($p = 0.008$); psychological ($p = 0.002$); social ($p = 0.028$) and environmental ($p = 0.038$). It is revealed that students who reported receiving family support to complete the course and had higher scores than those who reported not receiving this support for the psychological ($p = 0.008$) and social ($p = 0.001$) domains).

It was observed that students who reported difficulty in maintaining the course for financial reasons had lower scores in the physical ($p = 0.024$) and environmental ($p < 0.001$) domains. Those who reported difficulty staying on course for family or personal reasons presented lower scores in the physical ($p = 0.011$) and psychological ($p = 0.015$) domains. There were also lower scores

in the physical ($p = 0.027$) and psychological ($p = 0.021$) domains in the students who reported difficulty staying in the course for other reasons, among them, the most cited was the difficulty of transportation.

In the correlation analysis, a positive association between the perception of school performance and QOL scores in the physical ($r = 0.182$; $p = 0.019$), psychological ($r = 0.342$; $p < 0.001$), social ($r = 0.155$; $p = 0.047$) and environment ($r = 0.159$; $p = 0.041$). On the other hand, there was a negative correlation between the degree of learning difficulty in the high school and QOL subjects in the psychological ($r = -0.202$; $p = 0.009$) and environment ($r = -0.201$; $p = 0.010$) domains (Table 3).

Table 3. Bivariate analysis of factors associated with quality of life domains. Goiânia (GO), Brazil, 2018.

Variables	Physical		Psychological		Social		Environment	
	Average(SD)	p ¹						
Sex								
Female	59.2(16.0)	0.166	62.3(18.1)	0.982	64.6(22.5)	0.496	38.3(14.7)	0.227
Male	64.9(15.3)		62.2(17.3)		61.8(20.0)		42.8(12.8)	
Campus								
A	60.1(18.2)	0.674	63.0(18.2)	0.446	65.4(21.4)	0.848	38.3(14.5)	0.474
B	58.9(14.3)		60.5(17.3)		64.7(24.8)		40.2(14.5)	
Works								
No	57.4(15.7)	0.080	59.4(17.4)	0.062	61.6(21.2)	0.063	35.8(12.8)	0.019
Yes	61.8(16.0)		64.7(18.2)		68.1(22.7)		41.1(15.4)	
Willingness to give up the course								
No	64.5(15.2)	0.008	68.5(17.8)	0.002	70.6(22.0)	0.028	42.1(13.7)	0.038
Yes	57.5(15.9)		59.3(17.3)		62.6(21.9)		37.1(14.7)	
Family support to complete the course								
No	59.4(16.3)	0.725	58.5(18.5)	0.008	59.6(21.9)	0.001	46.6(15.2)	0.056
Yes	60.2(15.7)		65.9(16.8)		70.6(21.3)		40.9(13.6)	
Institutional support to complete the course								
No	60.3(15.9)	0.692	62.1(17.5)	0.865	63.4(21.9)	0.249	37.8(14.4)	0.329
Yes	59.3(16.0)		62.6(18.6)		67.4(22.5)		40.0(14.6)	
Motivation to complete the course through the job market								
No	60.2(15.7)	0.825	61.9(17.8)	0.830	62.6(21.8)	0.236	40.4(15.2)	0.286
Yes	59.6(16.2)		62.6(18.2)		66.8(22.4)		37.9(14.1)	
Difficulty staying on course by work routine								
No	60.7(15.9)	0.333	63.2(18.0)	0.410	65.3(21.7)	0.992	39.5(14.7)	0.384
Yes	58.2(16.0)		60.8(18.0)		65.2(23.3)		37.4(14.1)	
Difficulty staying on course for financial reasons								
No	62.6(14.6)	0.024	64.4(18.0)	0.140	67.6(22.5)	0.182	42.7(16.1)	< 0.001
Yes	57.0(17.0)		60.3(17.8)		63.0(21.8)		34.9(11.6)	
Difficulty staying on course for family or personal reasons								
No	61.8(16.0)	0.011	64.5(18.4)	0.015	66.1(23.0)	0.448	39.8(15.6)	0.123
Yes	54.9(15.0)		57.0(15.8)		63.2(20.2)		36.4(11.3)	
Difficulty staying on course through subject learning								
No	60.8(16.4)	0.269	63.4(17.7)	0.306	67.0(20.8)	0.148	39.2(13.0)	0.651
Yes	57.9(15.0)		60.3(18.4)		61.7(24.5)		38.0(17.2)	
Difficulty staying on course for other reasons (transportation)								
No	58.9(15.9)	0.027	61.2(17.9)	0.021	64.2(22.5)	0.091	38.4(14.2)	0.346
Yes	67.6(14.8)		71.5(16.5)		73.6(18.6)		41.8(17.0)	
	r²	p	r²	P	r²	p	r²	p
Age (years)	0.052	0.504	0.138	0.077	-0.010	0.901	0.090	0.249
Year of the course	-0.051	0.513	-0.033	0.677	-0.050	0.522	-0.018	0.820
School performance	0.182	0.019	0.342	<0.001	0.155	0.047	0.159	0.041
Learning disabilities in subjects do Ensino Médio	-0.149	0.057	-0.202	0.009	-0.136	0.082	-0.201	0.010
Learning disabilities in subjects of Nursing	-0.132	0.091	-0.152	0.052	-0.117	0.135	-0.120	0.124

Abbreviations: SD: Standard Deviation; 1. Student's t-test for independent samples; 2. Pearson correlation coefficient.

Table 4 shows the multiple regression analyzes of factors associated with QOL domain scores. There was a positive association between age and psychological domain score ($\beta = 0.32$; $p = 0.040$), that is, the older the better the QOL of this domain. There was also a positive association between work and environment domain score ($\beta = 5.01$; $p = 0.025$), thus, students who worked presented better QOL of this domain when compared to those who did not work.

There was a negative association between willingness to drop out and QOL scores in the physical ($\beta = -6.08$; $p = 0.018$), psychological ($\beta = -7.72$; $p = 0.007$), social ($\beta = -8.15$; $p = 0.030$) and environment ($\beta = -5.10$; $p = 0.027$), i.e. students who reported willingness to drop out of the course had worse QOL than those without this report (Table 4). It was associated with the difficulty of staying in the course for financial reasons negatively to the physical ($\beta = -5.27$; $p = 0.043$) and environment ($\beta = -7.75$; $p = 0.001$) domains;

thus, the QOL of these domains was worse in students who reported having financial difficulties (Table 4).

Staying with family support was also positively associated with QOL scores in the psychological ($\beta = 7.68$; $p = 0.003$), social ($\beta = 11.11$; $p = 0.001$) and environment ($\beta = 4$) domains. , 70; $p = 0.026$); on the other hand, the difficulty of staying in the course for family and personal reasons was negatively associated with the physical domain QOL scores ($\beta = -5.57$; $p = 0.043$). This result suggests an increase in QoL with family support and a decrease in physical QoL for family and personal reasons (Table 4).

Finally, it was found that the perception of school performance was positively associated with the QOL scores of the physical ($\beta = 4.42$; $p = 0.032$), psychological ($\beta = 7.50$; $p = 0.001$), social ($\beta = 5.22$; $p = 0.049$) and environment ($\beta = 3.47$; $p = 0.048$), i.e. the higher the perception of school performance the better the QOL; On the other

hand, the higher the level of learning difficulty in the high school subjects, the worse the QOL score in the psychological domain ($\beta = -4.82$; $p = 0.036$)

(Table 4). In addition, the models did not present multicollinearity problems ($IVF < 4.0$).

Table 4. Multiple regression analysis associated with quality of life domains. Goiânia (GO), Brazil, 2018.

Variables	B	CI 95%	t	p-value
Physical domain				
Willingness to give up the course	-6.08	-11,10; 1,05	-2,39	0,018
Difficulty staying on course for financial reasons	-5.27	-10,38; 0,16	-2,04	0,043
Difficulty staying on course for family or personal reasons	-5.57	-10,98; 0,17	-2,04	0,043
Perception of school performance	4.42	0,37; 8,47	2,16	0,032
VIF: 1.48				
R ² : 0.149				
Psychological domain				
Age	0.32	0,01; 0,63	2,07	0,040
Willingness to give up the course	-7.72	-13,27; 2,17	-2,75	0,007
Family support to continue the course	7.68	2,64; 12,78	3,01	0,003
Perception of school performance	7.50	2,97; 12,04	3,27	0,001
Learning disabilities in high school subjects	-4.82	-9,33; -0,32	-2,12	0,036
VIF: 1.70				
R ² : 0.125				
Social domain				
Willingness to give up the course	-8.15	-15,49; 0,81	-2,19	0,030
Family support to continue the course	11.11	4,52; 17,71	3,33	0,001
Perception of school performance	5.22	0,03; 10,42	1,99	0,049
VIF: 1.87				
R ² : 0.147				
Environment domain				
Work	5.01	0,63; 9,40	2,26	0,025
Difficulty staying on course for financial reasons	-7.75	-12,29; 3,21	-3,37	0,001
Willingness to give up the course	-5.10	-9,61; -0,59	-2,23	0,027
Family support to continue the course	4.70	0,58; 8,82	2,25	0,026
Perception of school performance	3.47	0,04; 6,90	2,00	0,048
VIF: 1.24				
R ² : 0.182				

Abbreviations: B: Regression coefficient; 95% CI: 95% confidence interval; t: test t.

DISCUSSION

This study shows a lower self-rated QoL and self-satisfaction index than that found in a study conducted with undergraduate Nursing students.¹⁰ The domain with the highest average QOL score was the social domain (65.2) and the domain with the lowest score was the environment (38.8), a reality also found in other studies.^{9,15-7}

It is noted that the Nursing Technician course in the institution studied is predominantly nocturnal and aimed at young people and adults, and the difficulty of reconciling the work routine and studies is a reality pointed out in a study with students of the EJA modality as a variable capable of influencing the potential risk of dropping out of this public.¹⁸⁻⁹

It is emphasized that the environment domain is composed of facets related to housing and transportation conditions, leisure opportunities, healthy physical environment and financial sufficiency. In this context, it was pointed out by the majority of students, difficulties in staying in the course, among them, the financial reasons stood out and it is worth remembering that a considerable percentage reported not being working. Therefore, studies that show that the financial factor interferes with QOL may be corroborated and may influence school success and dropout rates, also reflecting possible feelings of student frustration.²⁰⁻²

A considerable percentage of students (29.1%) reported being dissatisfied with their health and 10.9% considering their QoL as poor. Comparing QoL among students from different courses, the worst QoL scores among health students were compared by another study, suggesting a relationship with the formative process and different perception of the concept of health when compared to the areas of Social Sciences, Human and Mathematics.²³

Among the intervening factors in the motivation of the students to complete the course, family and institutional support and the perspective of insertion in the professional market stand out. In other studies, it was reported that the training scenario requires higher responsibilities from students, acquisition of new habits and behaviors, and may influence QoL.²⁴⁻⁵

It is necessary to strengthen support networks as an attempt to reduce the emotional burden generated by the reconciliation between the academic trajectory and daily activities. This study shows a positive association between the support network and higher QOL scores in the psychological and social domains. Therefore, it is considered that social support contributes to academic achievement, emphasizing that the lack of support may be associated with higher stress load and prediction of depressive symptoms in students.²⁶⁻⁷

It is noted that the predominance of female students in nursing education is also observed in

other studies with the same public^{24,28-9} and brings a cultural component, where the assistance provided to the individual is still perceived as a female activity, being the women workforce predominant in the tasks that involve the care.³⁰

Limitations of this study are the cross-sectional design, the self-administered questionnaire and the possibility of response bias. It is known that cross-sectional studies do not allow the establishment of the cause and effect relationship between the outcomes and the investigated variables, since they were collected at the same time. Longitudinal studies are recommended to verify causal relationships. It is believed that self-reported responses may underestimate the frequency of some variables, especially those related to personal issues. It is also noted that the use of self-administered questionnaires results in the loss of individuals due to incompleteness, as incomplete questionnaires in the main item (WHOQOL) were excluded from the study.

It is noteworthy that, despite the limitations, this study of QoL in the public of nursing students at technical level, in the EJA modality, is a pioneer in Brazil, which made comparisons of the results difficult. Furthermore, the study analyzed the factors associated with QOL, using the multiple regression model, which may support a better understanding of the phenomena in this population.

Finally, it is noteworthy that the technical education integrated with high school in Brazil has a perspective of inclusion and social transformation. Therefore, it is believed that understanding the challenges experienced by students, in their school, individual and social contexts, is an important step for institutional planning, allowing advances in the policy of student permanence and success and teaching capable of positively impacting the life of the egress, future member of the health team.

CONCLUSION

This study evidenced the predominance of female students, the social domain with the best average rating and the environment with the worst average rating. Social vulnerability related to financial reasons was found to be negatively associated with QOL scores in the physical and environmental domains. The existence of a family and institutional support network was positively associated with environmental, social and psychological scores.

New researches are suggested, with nursing technical students, since they represent the largest workforce within the health team, and the investment in studies in this public enables the discussion and implementation of nursing education policies focused holistic pedagogy and the broader view of health.

REFERENCES

1. Stein WM, Ferrell BA. Pain in Nursing Home. *Clin Geriatr Med.* 1996 Aug;12(3):601-13. DOI: [10.1016/S0749-0690\(18\)30220-9](https://doi.org/10.1016/S0749-0690(18)30220-9)
2. Haraldstad K, Wahl A, Andenæs R, Andersen JR, Andersen MH, Beisland E, et al. A systematic review of quality of life research in medicine and health sciences. *Qual Life Res.* 2019 Oct;28(10):2641-50. DOI: [10.1007/s11136-019-02214-9](https://doi.org/10.1007/s11136-019-02214-9).
3. Weiss D, Rydland HT, Oversveen E, Jensen MR, Solhaug S, Krokstad S. Innovative technologies and social inequalities in health: a scoping review of the literature. *PLoS ONE.* 2018 Apr;1-20. DOI: [10.1371/journal.pone.0195447](https://doi.org/10.1371/journal.pone.0195447)
4. World Health Organization. Constitution of the World Health Organization [Internet]. Geneva: WHO; 1946 [cited 2018 Sept 21]. Available from: http://www.who.int/governance/eb/who_constitution_en.pdf
5. Organização Mundial de Saúde. Diminuindo as diferenças: a prática das políticas sobre determinantes sociais da saúde [Internet]. Geneva: OMS; 2011 [cited 2019 Ago 16]. Available from: http://www.who.int/sdhconference/discussion_paper/Discussion_Paper_PT.pdf
6. World Health Organization. The development of the World Health Organization quality of life assessment instrument (WHOQOL) [Internet]. Geneva: WHO; 1997 [cited 2019 June 12]. Available from: http://www.who.int/mental_health/media/68.pdf
7. Santos VLCG, Oliveira AS, Amaral AFS, Nishi ET, Junqueira JB, Kim SHP. Quality of life in patients with chronic wounds: magnitude of changes and predictive factors. *Rev Esc Enferm USP.* 2017;51:e03250. DOI: [10.1590/S1980-220X2016049603250](https://doi.org/10.1590/S1980-220X2016049603250)
8. Amaral TLM, Amaral CA, Lima NS, Herculano PV, Prado PR, Monteiro GTR. Multimorbidity, depression and quality of life among elderly people assisted in the Family Health Strategy in Senador Guimard, Acre, Brazil. *Ciê Saude Coletiva.* 2018;23(9):3077-3084. DOI: [10.1590/1413-81232018239.22532016](https://doi.org/10.1590/1413-81232018239.22532016)
9. Serinolli MI, Novaretti MCZ. A cross-sectional study of sociodemographic factors and their influence on quality of life in medical students at Sao Paulo, Brazil. *PLoS ONE.* 2017;12(7):e0180009. DOI: [10.1371/journal.pone.0180009](https://doi.org/10.1371/journal.pone.0180009)
10. Moura IH, Nobre RS, Cortez RMA, Campelo V, Macêdo SF, Silva ARV. Quality of life of undergraduate nursing students. *Rev Gaúcha Enferm.* 2016;37(2):e55291. DOI: [10.1590/1983-1447.2016.02.55291](https://doi.org/10.1590/1983-1447.2016.02.55291)
11. Rosa CM, Lopes NFM, Carbello SRC. Expansion, democratisation and the quality of basic education <https://periodicos.ufpe.br/revistas/revistaenfermagem/index>

- in Brazil. *Póiesis Pedagógica*. 2016 Jan/June;13(1):162-79. DOI: [10.5216/rpp.v13i1.35982](https://doi.org/10.5216/rpp.v13i1.35982)
12. McEwen M, Wills EM. *Bases teóricas de enfermagem*. 4th ed. Porto Alegre: Artmed; 2016.
13. Freire P. *Pedagogia do Oprimido*. 60th ed. Rio de Janeiro: Paz e Terra; 2016.
14. Tharani A, Husain Y, Warwick I. Learning environment and emotional well-being: a qualitative study of undergraduate nursing students. *Nurse Educ Today*. 2017 Dec; 59:82-7. DOI: [10.1016/j.nedt.2017.09.008](https://doi.org/10.1016/j.nedt.2017.09.008)
15. Moritz AR, Pereira EM, Borba KP, Clapis MJ, Gevert VG, Mantovani MF. Quality of life of undergraduate nursing students at a Brazilian public university. *Invest Educ Enferm*. 2016;34(3):564-72. DOI: [10.17533/udea.iee.v34n3a16](https://doi.org/10.17533/udea.iee.v34n3a16)
16. Serinolli MI, Novaretti MCZ. A cross-sectional study of sociodemographic factors and their influence on quality of life in medical students at São Paulo, Brazil. *PLoS One*. 2017;12(7):e0180009. DOI: [10.1371/journal.pone.0180009](https://doi.org/10.1371/journal.pone.0180009)
17. Bampi LNS, Baraldi S, Guilhem D, Pompeu RB, Campos ACO. Nursing undergraduate students' perception of quality of life. *Rev Gaúcha Enferm*. 2013 June;34(2):125-32. DOI: [10.1590/S1983-14472013000200016](https://doi.org/10.1590/S1983-14472013000200016)
18. Chazan ACS, Campos MR, Portugal FB. Quality of life of medical students at the State University of Rio de Janeiro (UERJ), measured using Whoqol-bref: a multivariate analysis. *Ciêns Saúde Coletiva*. 2015 Feb;20(2):547-56. DOI: [10.1590/1413-81232015202.05182014](https://doi.org/10.1590/1413-81232015202.05182014)
19. Pedralli R, Cerutti-Rizzatti ME. The Dropout in the Youth and Adult Education: Problematizing the Phenomenon with Focus in the Written Culture. *Rev Bras Linguist Apl*. 2013 July/Sept; 13(3):771-88. DOI: [10.1590/S1984-63982013005000019](https://doi.org/10.1590/S1984-63982013005000019)
20. Bublitz S, Guido LA, Kirchhof RS, Neves ET, Lopes LFD. Sociodemographic and academic profile of nursing students from four Brazilian institutions. *Rev Gaúcha Enferm*. 2015 Jan/Mar;36(1):77-83. DOI: [10.1590/1983-1447.2015.01.48836](https://doi.org/10.1590/1983-1447.2015.01.48836)
21. Porrás CV, Parra DI, Roa Díaz ZM. Factores relacionados con la intención de desertar en estudiantes de enfermería. *Rev Cienc Cuid*. 2019; 16(1), 86-97. DOI: [10.22463/17949831.1545](https://doi.org/10.22463/17949831.1545)
22. Aboshaiqah AE, Cruz JP. Quality of Life and Its Predictors Among Nursing Students in Saudi Arabia. *J Holist Nurs*. 2018 July. DOI: [10.1177/0898010118784147](https://doi.org/10.1177/0898010118784147)
23. Pekmezovic T, Popovic A, Tepaycevic DK, Gazibara T, Paunic M. *Qual Life Res*. 2011 Apr;20(3):391-7. DOI: [10.1007/s11136-010-9754-x](https://doi.org/10.1007/s11136-010-9754-x)
24. Moura IH, Nobre RS, Cortez RMA, Campelo V, Macêdo SF, Silva ARV. Qualidade de vida de estudantes de graduação em enfermagem. *Rev*

Gaúcha Enferm. 2016; 37(2):e55291. DOI: [10.1590/1983-1447.2016.02.55291](https://doi.org/10.1590/1983-1447.2016.02.55291).

25. Walker S, Rossi D, Anastasi J, Gray-Ganter G, Tennent R. Indicators of undergraduate nursing students' satisfaction with their learning journey: an integrative review. *Nurs Educ Today*. 2016 Aug;43:40-8. DOI: [10.1016/j.nedt.2016.04.011](https://doi.org/10.1016/j.nedt.2016.04.011)
26. Langame AP, Neto JAC, Melo LNB, Castelano ML, Cunha M, Ferreira RE. Quality of life of university students and their academic performance. *Rev Bras Promoç Saúde*. 2016 July/Sept; 29(3):313-25. DOI: [10.5020/18061230.2016.p313](https://doi.org/10.5020/18061230.2016.p313)
27. Souza VS, Silva DS, Lima LV, Teston EF, Benedetti GMS, Costa MAR, et al. Quality of life of nursing professionals working in critical sectors. *Rev Cuid*. 2018 May;9(2):2177-86. DOI: [10.15649/cuidarte.v9i2.506](https://doi.org/10.15649/cuidarte.v9i2.506)
28. Chaves ECL, Lunes DH, Moura CC, Carvalho LC, Silva AM, Carvalho EC. Anxiety and spirituality in university students: a cross-sectional study. *Rev Bras Enferm*. 2015 May/Jan; 68(3):444-9. DOI: [10.1590/0034-7167.2015680318i](https://doi.org/10.1590/0034-7167.2015680318i)
29. Santos TCMM, Martino MMF, Sonati JG, Faria AL, Nascimento EFA. Sleep quality and chronotype of nursing students. *Acta Paul de Enferm*. 2016 Nov/Dec;29(6):658-63. DOI: [10.1590/1982-0194201600092](https://doi.org/10.1590/1982-0194201600092)
30. Carvalho AMB, Araújo SNM, Lima IRS, Silva ECA. Motivational factors related to the choice of graduation in Nursing. *J Health Sci Inst [Internet]*. 2015 Jan/Mar [cited 2019 June 18]; 33(1):56-62. Available from: https://www.unip.br/presencial/comunicacao/publicacoes/ics/edicoes/2015/01_jan-mar/V33_n1_2015_p56a62.pdf

Corresponding author

Patrícia Silva Nunes

Email: ifgpatricianunes@gmail.com

Submission: 2019/09/04

Accepted: 2019/10/28

Copyright© 2019 Journal of Nursing UFPE on line/JNOUL.

 This is an Open Access article distributed under the terms of the [Creative Commons Attribution-ShareAlike 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/). This license lets others distribute, remix, tweak, and build upon your work, even commercially, as long as they credit you for the original creation. Recommended for maximum dissemination and use of licensed materials.

<https://periodicos.ufpe.br/revistas/revistaenfermagem/index>