FACTORS ASSOCIATED WITH THE PERCEPTION OF QUALITY OF LIFE IN MASTER'S STUDENTS AT A PUBLIC UNIVERSITY IN THE CENTRAL REGION OF THE COUNTRY

FATORES ASSOCIADOS A PERCEPÇÃO DA QUALIDADE DE VIDA EM ESTUDANTES DE MESTRADO DE UMA UNIVERSIDADE PÚBLICA DA REGIÃO CENTRAL DO PAÍS

FACTORES ASOCIADOS A LA PERCEPCIÓN DE LA CALIDAD DE VIDA ENTRE LOS ESTUDIANTES DE MAESTRÍA DE UNA UNIVERSIDAD PÚBLICA EN LA REGIÓN CENTRAL DEL PAÍS

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ABSTRACT

Introduction: When deciding to take the master's course, the individual must be aware and prepared to make several adaptations in his life, which can cause changes in his quality of life.

Objective: To evaluate the factors associated with the perception of quality of life and health in master's students at a public university in the central region of the country.

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Methods: Cross-sectional, analytical study, with 375 master's students who answered a structured questionnaire with sociodemographic, academic, health questions and the WHOQOL-bref instrument; electronically, from August to November 2018. The multiple Poisson regression model with robust variance was used to verify associations. Results: The variables religion, marital status, time of course and practice of physical activity showed a significant association with the student's perception of their health status. The negative perception for quality of life and health was associated with lower scores in the psychological domain, while the positive perception was associated with higher scores in the physical, psychological and environment domains.

Conclusion: With just under 31% of the master's students presenting a positive perception for quality of life and health together, it is suggested to adopt health promotion actions aimed at strengthening them mentally and physically.

Keywords: Quality of Life. Student Health. Health Promotion.

RESUMO

Introdução: Ao decidir realizar o curso de mestrado o indivíduo deve estar ciente e preparado para realizar diversas adaptações em sua vida, podendo ocasionar mudanças em sua qualidade de vida.

Objetivo: Avaliar os fatores associados a percepção da qualidade de vida e saúde em estudantes de mestrado de uma universidade pública da região central do país.

Métodos: Estudo transversal, analítico, com 375 mestrandos que responderam um questionário estruturado com questões sociodemográficas, acadêmicas, de saúde e o instrumento WHOQOL-bref; por meio eletrônico, no período de agosto a novembro de 2018. O modelo de regressão de Poisson múltiplo com variância robusta foi utilizado para verificar as associações. Resultados: As variáveis religião, estado conjugal, tempo de curso e prática de atividade física apresentaram associação significativa com a percepção do estudante a respeito do seu estado de saúde. A percepção negativa para qualidade de vida e saúde teve associação com escores menores no domínio psicológico, enquanto a percepção positiva se associou a escores maiores nos domínios físico, psicológico e meio ambiente.

Conclusão: Com pouco menos de 31% dos mestrandos apresentando uma percepção positiva para qualidade de vida e saúde conjuntamente, sugere-se adotar ações de promoção da saúde direcionadas a fortalecê-los mentalmente e fisicamente.

Palavras-chave: Qualidade de Vida. Saúde do Estudante. Promoção da Saúde.

RESUMEN

Introducción: Al decidir cursar una maestría, las personas deben ser conscientes y estar preparadas para realizar varios ajustes en sus vidas, lo que puede llevar a cambios en su calidad de vida.

Objetivo: Evaluar los factores asociados con la percepción de la calidad de vida y la salud en estudiantes de maestría en una universidad pública en la región central del país.

Métodos: Se realizó un estudio transversal y analítico con 375 estudiantes de maestría que respondieron un cuestionario estructurado con preguntas sociodemográficas, académicas y de salud, así como el instrumento WHOQOL-bref, electrónicamente, entre agosto y noviembre de 2018. Se utilizó un modelo de regresión de Poisson múltiple con varianza robusta para verificar las asociaciones. Resultados: Las variables religión, estado civil,

duración del curso y actividad física mostraron una asociación significativa con la percepción del estudiante sobre su estado de salud. La percepción negativa de la calidad de vida y la salud se asoció con puntuaciones más bajas en el dominio psicológico, mientras que la percepción positiva se asoció con puntuaciones más altas en los dominios físico, psicológico y ambiental.

Conclusión: Dado que poco menos del 31 % de los estudiantes de máster manifiestan una percepción positiva tanto de su calidad de vida como de su salud, se sugiere adoptar acciones de promoción de la salud para fortalecerlos física y mentalmente.

Palabras clave: Calidad de Vida. Salud Estudiantil. Promoción de la Salud.

1 INTRODUCTION

By defining quality of life as proposed by the World Health Organization (WHO) as *"the individual's perception of his or her insertion in life in the context of the culture and value systems in which he or she lives and in relation to his or her goals, expectations, standards and concerns"* (THE WHOQOL GROUP, 1995, p.1405) and using the *WHOQOL-bref instrument* to understand and evaluate the quality of life of individuals, it is possible to reflect the subjectivity of the quality of life construct in the cultural, social and environmental contexts (FLECK et al., 2000).

In this more generalized conception, the term quality of life is referred to as an object of complex study, as it has multidimensional characteristics, encompassing important aspects from the physical, psychological, social, environmental point of view, among others, in addition to varying with the moment and circumstances experienced individually or collectively (MISSIAS-MOREIRA, 2017).

School cycles are aspects that can be analyzed from this perspective of quality of life, as the stages of each cycle require new adaptations in the student's life, due to the natural changes that occur with development in the biological, psychological, social, and environmental spheres, simultaneously (VIZZOTTO et al., 2017). Some researchers have been applying the strategy of using instruments that measure quality of life to map information about students and, thus, propose actions that promote their health and well-being (LANTYER et al., 2016; VIZZOTTO et al., 2017; ANVERSA et al., 2018).

Although the number of studies on the topic of quality of life and students has increased, there is still a certain lack of studies related to *stricto* sensu graduate students in Brazil, especially associating them with factors that cause gains or losses to quality of life (TEIXEIRA et al., 2017), thus being relevant to study and get to know graduate students and the graduate environment. In this study, preference was given to studying master's students, as it is understood that the lack or little knowledge about the graduate environment, combined with the relationship between the time available to complete the course (24 months) and the perfection that has been required of the research work by advisors and scientific journals, expose them to a different reality from doctoral students. In other words, it is a population exposed to a competitive routine, of demands, tensions and demands, however, having a short period to present satisfactory results (COSTA and NEBEL, 2018).

In her study with graduate students, GALDINO (2015) found that the increase in the levels of *burnout* syndrome was related to a lower quality of life (strong negative correlation) and several items of quality of life were predictors of *bournout syndrome*, according to the author factors such as the academic environment and stricto *sensu* training played a

negatively relevant role in the study. Corroborating, SOUZA et al. (2016) pointed out that the stress condition was present in 59.1% of the incoming master's students and in 41.2% of the graduates, causing psychological and physical impacts such as: anxiety, nervousness, anguish, tension, exhaustion, lack of concentration (loss of quick thinking), mood swings (reduced patience, irritability, fights) and isolation (difficulty interacting socially).

Thus, it was decided to map the perception of quality of life in master's students, in order to verify their fundamental and specific needs, thus making it possible to contribute to the implementation of actions that promote their health and well-being. Therefore, the objective of this study was to evaluate the factors associated with the perception of quality of life and health in master's students from a public university in the central region of the country.

2 METHODS

This is a cross-sectional observational study, with a descriptive and analytical analysis component, of the self-administered survey type, carried out through the electronic platform (*SurveyMonkey*), from August to November 2018, with the population of master's students from a public university in the central region of the country. According to the university's technology and information secretariat (STI), in all, there were 1,740 master's students regularly enrolled in one of the 47 courses offered.

The sample planning used was considering the list-based sampling method (CARLOMAGNO, 2018) and the sample sizing for estimates of means with relative error and finite population (ARANGO, 2016). Thus, the approximate sample size for the research was 315 master's students, considering a mean (= 60) and a standard deviation (s = 15) obtained in a pilot study with $\bar{x}$*lato sensu* graduate students in statistics, an estimation error of 2.5% (*e* = 0.025), a confidence level of 95% ($Z\alpha/2$ = 1.96) and the population size (N = 1,740). To avoid the problem of lack of response, a minimum rate of 85% was established (ESPINOSA et al., 2019), that is, dividing 315 by 0.85 resulted in the need for at least 371 master's students in the sample.

For data collection, an invitation was sent by the university's STI to the 1,740 master's students, containing all the information considered necessary, along with the informed consent form (ICF) and the *link* to access the questionnaire via e-mail, thus giving everyone an equal opportunity to participate in the study. To validate the questionnaire, the master's students were asked to inform the initial and final three digits of their enrollment, allowing a better control of the sampling process.

The questionnaire was structured with questions about sociodemographic characteristics (gender, age, religion, marital status, children, professional occupation, family

income), academic characteristics (area of knowledge, scholarship holder, exclusive dedication, time in the course, advisor, research project), lifestyle (alcoholic beverages, smokers, physical activity) and the perception of the master's students of their health status, together with the *WHOQOL-bref* instrument to assess their quality of life.

The *WHOQOL-bref* was translated and validated for use in Brazil by FLECK et al. (2000), consisting of 26 questions formulated on a 1- and 5-point *Likert* response scale , the first two of which refer to quality of life and satisfaction with health, and the remaining 24 correspond to the 24 facets that make up the original instrument (*WHOQOL-100*), which properly grouped form four domains: physical, psychological, social relationship and environment. The final scores of each domain are calculated by a syntax, which results in a scale from 0 to 100, indicating the individual's perception of their satisfaction in each aspect related to their quality of life, basically, the higher the score, the better this perception (SILVA et al., 2014).

After the period established for the research, data were extracted from the electronic platform (*SurveyMonkey*), randomly obtaining the participation of 482 master's students, but those who declared themselves physically disabled, as they were not exposed to the same factors as their colleagues who do not have disabilities (COUTINHO et al., 2017), as well as those who insufficiently filled out the *WHOQOL-bref instrument*, making it impossible to calculate the value of two or more domains, totaling 375 validated questionnaires in the end.

In order to analyze the reliability of the questionnaire, internal consistency was calculated using Cronbach's alpha coefficient, and the adequacy of the sample size was verified using the Kaiser-Meyer-Olkin coefficient (KMO). Subsequently, two extreme and simultaneous groups were determined in relation to self-assessment of quality of life and satisfaction with health, formed by the first (how would you evaluate your quality of life?) and second (how satisfied are you with your health?) questions from *the WHOQOL-bref*, namely: Poor/Dissatisfied QoL (master's students who declared themselves to have a poor or very poor quality of life and dissatisfied or very dissatisfied with their health) and Good/Satisfied QoL (master's students who declared themselves to have a good or very good quality of life and satisfied or very satisfied with their health).

The characterization of the master's students according to sociodemographic, academic, lifestyle and perception of health status variables was carried out by means of a frequency table, and for the associations between perception of health status and these independent variables, the crude prevalence ratio with their respective confidence intervals and the chi-square test were considered. And then multiple Poisson regression analysis with robust variance was performed, where the variables that presented a p-value ≤ 0.20 in the

chi-square test were initially included in the model and only those with a p-value < 0.05 remained in the final model.

Regarding the analysis of the domain scores, descriptive statistics were calculated and it was proven by the *Shapiro-Wilk* test that their distributions were not symmetrical, so the median was used as the cutoff point (ESPINOSA et al., 2020). To analyze the association of each of the dependent variables Perception of Health Status, Poor/Dissatisfied QoL and Good/Satisfied QoL with the domains having scores lower or higher than the median, the same procedures described above were performed. All statistical analyses were performed with the aid of the Stata version 13 statistical program, with all intervals with a confidence of 95% and the tests with a significance level equal to 5%.

This research was approved by the Research Ethics Committee of the Federal University of Mato Grosso - UFMT (CEP SAÚDE UFMT), under opinion No. 2,658,582 and complied with all the ethical prerogatives of Resolution No. 466/2012 of the National Health Council.

3 RESULTS

A total of 375 master's students from all areas of knowledge participated in this study, with a higher participation of master's students enrolled in the areas of health sciences (23.7%) and human sciences (21.9%) and a lower participation in the areas of engineering (2.1%) and linguistics, letters and arts (2.9%), however, it should be noted that the areas of knowledge were not considered in the sample calculation, which makes it impossible to generalize about this population with the results obtained in Table 1.

As for the internal consistency measured by Cronbach's alpha coefficient, it was excellent for the physical (α = 0.89), psychological (α = 0.87), social relationship (α = 0.90) and environment (α = 0.90) domains of the *WHOQOL-bref*. And the adequacy of the sample size was considered average, as the KMO coefficient was equal to 0.78 (CUNHA et al., 2017). All the questions were almost completely filled out by all master's students, only those related to date of birth and alcohol consumption were left blank by 14 and 15 master's students, respectively. Thus, the mean age of the master's students was 30.84 years with a standard deviation of 7.35 years.

According to the data observed in Table 1, more than half of the master's students considered their health status as positive (11.20% - Very good and 41.87% - Good), however, it was decided to verify in Table 2 which are the sociodemographic, academic and lifestyle characteristics of the master's students associated with the fact that they did not consider their health status positive (regular, poor and very poor).

Table 1

Absolute and relative frequencies of the master's student's perception of their health status, in each of the areas of knowledge, Mato Grosso, Brazil, 2018

Areas of knowledge	Very good n (%)	Good n (%)	Regular n (%)	Bad n (%)	Very bad n (%)
Agricultural Sciences	5 (11,36)	19 (43,19)	15 (34,09)	5 (11,36)	0 (0,00)
Life Sciences	3 (16,67)	6 (33,33)	7 (38,89)	2 (11,11)	0 (0,00)
Health Sciences	7 (7,87)	42 (47,19)	34 (38,20)	6 (6,74)	0 (0,00)
Exact and Earth Sciences	9 (16,98)	22 (41,51)	20 (37,74)	2 (3,77)	0 (0,00)
Humanities	9 (10,98)	31 (37,80)	31 (37,80)	9 (10,98)	2 (2,44)
Applied Social Sciences	3 (9,38)	14 (43,75)	14 (43,75)	1 (3,12)	0 (0,00)
Engineering	0 (0,00)	2 (25,00)	4 (50,00)	2 (25,00)	0 (0,00)
Linguistics, Letters and Arts	3 (27,27)	6 (54,55)	2 (18,18)	0 (0,00)	0 (0,00)
Multidisciplinary	3 (7,89)	15 (39,47)	16 (42,11)	4 (10,53)	0 (0,00)
Grand Total	**42 (11,20)**	**157 (41,87)**	**143 (38,13)**	**31 (8,27)**	**2 (0,53)**

Source: Prepared by the authors.

Table 2 shows that the variables religion, marital status, family income, length of course, smoker and practice of physical activity showed a significant association (p-value < 0.05) with the fact that the master's student did not perceive his health status as positive and the final model of the multiple Poisson regression analysis was composed of the significant variables religion, marital status, length of course and practice of physical activity.

Table 3 shows the associations between the master's students with non-positive perception of their health status and those who had scores below the median in each of the *WHOQOL-bref* domains. For this analysis, first, the *Shapiro-Wilk* test was performed and the calculation of the mean ($\bar{x}$), median (med) and standard deviation (*s*) values were performed referring to the scores of the master's students in the physical (= 61.2; med = 60.7; $\bar{x}s$ = 15.9), psychological (= 55.4; med = 58.3; $\bar{x}$ *s* = 18.3), social relationship (= 55.4; med = 58.3; $\bar{x}s$ = 20.9) and environment (= 54.9; med = 56.3; $\bar{x}s$ = 14.9), due to the fact that they are not symmetrical, the median was used as the cutoff point.

Table 2

Association between master's students with non-positive perception of their health status and sociodemographic, academic, and lifestyle characteristics, with their respective crude and adjusted prevalence ratios, 95% confidence intervals, and p. Mato Grosso, Brazil, 2018

Features	Perception of health status		Prevalence ratio (Crude)		Prevalence ratio (Adjusted)	
	Positive (n = 199)	Not positive (n = 176)	BPS [CI(95%)]	p-value	RPA [CI(95%)]	p-value
Sociodemographic						

Gender						
Male	72	58	1,00			
Women	127	118	1,08 [0,86; 1,36]	0,512		
Age (years)						
Under 30	101	97	1,11 [0,88; 1,39]	0,361		
30 or more	91	72	1,00			
Religion						
Yes	160	114	0,68 [0,55; 0,84]	0,001	0,77 [0,63; 0,95]	0,013
No	39	62	1,00		1,00	
Marital status						
With partner	92	62	0,78 [0,62; 0,98]	0,031	0,76 [0,61; 0,95]	0,015
No companion	107	114	1,00		1,00	
Children						
Yes	26	20	0,92 [0,65; 1,30]	0,616		
No	173	156	1,00			
Family income						
C and D	143	147	1,49 [1,08; 2,04]	0,007		
A and B	56	29	1,00			
Professional occupation						
Master's student	77	83	1,00			
Teacher	53	34	0,79 [0,59; 1,06]	0,153		
Other	69	59	0,97 [0,77; 1,22]			
Academics						
Scholarship holder						
Yes	81	88	1,22 [0,98; 1,51]	0,071		
No	118	88	1,00			
Availability						
Partial	92	77	1,00			
Total (DE)	107	99	1,05 [0,85; 1,31]	0,630		
Course time						
Less than 1 year	105	72	0,77 [0,62; 0,97]	0,022	0,76 [0,62; 0,94]	0,012
1 year or +	94	104	1,00		1,00	
Advisor						
That's who I chose	135	112	1,00			
It wasn't who I chose	48	54	1,18 [0,95; 1,48]	0,290		
It does not have	16	10	0.81 [0,49; 1,33]			
Research project						
Changed the initial theme	44	50	1,19 [0,94; 1.49]	0,160		
It didn't change the initial theme	155	126	1,00			
Lifestyle						
Alcoholic beverage*						
Consumes a lot	33	34	1,11 [0,85; 1,45]			
Consume moderately	93	63	0,78 [0,62; 0,99]	0,112		
Does not consume	66	71	1,00			
Smoker						

Yes	21	31	1,33 [1,03; 1,71]	0,048		
No	178	145	1,00			
Practice Physical Activity						
Yes	143	72	1,00		1,00	
No	56	104	1,94 [1,56; 2,42]	<0.001	1,89 [1,52; 2,35]	<0.001

Source: Prepared by the authors.
* Consume a lot = consumption of 6 or more (doses/bowls/cans...) when drinking.
Consume moderately = consume 1 to 5 (doses/bowls/cans...) when drinking.

Table 3

Association between master's students with non-positive perception of their health status and scores of the WHOQOL-bref domains lower than the median, with their respective crude and adjusted prevalence ratios, 95% confidence intervals, and p. Mato Grosso, Brazil, 2018

Domains	Perception of health status		Prevalence ratio (Crude)		Prevalence ratio (Adjusted)	
	Positive (n = 199)	Not positive (n = 176)	BPS [CI(95%)]	p-value	RPA [CI(95%)]	p-value
Physical						
Score < med (60.7)	54	115	2,30 [1,82; 2,91]	<0.001	1,88 [1,44; 2,44]	<0.001
Score ≥ med (60.7)	145	61	1,00		1,00	
Psychological						
Score < med (58.3)	71	115	1,92 [1,36; 2,12]	<0.001	1,27 [0,96; 1,68]	0,089
Score ≥ med (58.3)	128	61	1,00		1,00	
Social Relationship						
Score < med (58.3)	66	102	1,70 [1,36; 2,12]	<0.001	1,23 [0,97; 1,55]	0,082
Score ≥ med (58.3)	133	74	1,00		1,00	
Environment						
Score < med (56.3)	73	100	1,54 [1,23; 1,91]	<0.001	1,12 [0,90; 1,40]	0,306
Score ≥ med (56.3)	126	76	1,00		1,00	

Source: Prepared by the authors.

In the multiple Poisson regression analysis, it can be seen that the psychological, social relationship and environment domains were not significant in relation to the non-positive perception of their health status, that is, when analyzed together, the physical domain was the only one that remained significant in the model (p-value <0.05). Thus, the prevalence of master's students with scores lower than the median in the physical domain perceiving their health status as non-positive is 1.88 times the prevalence of master's students with higher scores equal to the median in this domain (Table 3).

The results of the master's students' self-assessment regarding their quality of life and health, corresponding to the first two questions of the *WHOQOL-bref*, indicated that approximately 48% of them perceived their quality of life as good or very good and 17% as bad or very bad, while 38% felt satisfied or very satisfied with their health and 31% felt dissatisfied or very dissatisfied. When analyzing the self-assessment groups, 116 (30.94%) master's students belong to the QoL Good/Satisfied group, 47 (12.53%) to the QoL Poor/Dissatisfied group and 212 (56.53%) master's students are undefined, they were not classified in either of the two extreme groups.

Tables 4 and 5 show the significant associations (p-value <0.05) of the bivariate analyses between the master's students in the Poor/Dissatisfied QoL group and the scores of the *WHOQOL-bref domains* less than the median and the QoL Good/Satisfied group with the scores of the domains greater than or equal to the median, respectively.

In the multiple Poisson regression analysis, presented in Table 4, only the psychological domain remained significant (p-value < 0.05) in the model, i.e., the prevalence of master's students with scores lower than the median in the psychological domain belonging to the Poor/Dissatisfied QoL group is 7.27 times the prevalence of master's students with scores higher than the median in this domain.

Table 4

Association between master's students in the Poor/Dissatisfied QoL group and scores of the WHOQOL-bref domains lower than the median, with their respective crude and adjusted prevalence ratios, 95% confidence intervals, and pp values. Mato Grosso, Brazil, 2018

Domains	Poor/Dissatisfied QoL		Prevalence ratio (Crude)		Prevalence ratio (Adjusted)	
	Yes (n = 47)	No (n = 328)	BPS [CI(95%)]	p-value	RPA [CI(95%)]	p-value
Physical						
Score < med (60.7)	36	133	3,99 [2,09; 7,60]	<0.001	1,66 [0,91; 3,01]	0,098
Score ≥ med (60.7)	11	195	1,00		1,00	
Psychological						
Score < med (58.3)	44	142	14,90 [4,70; 47,23]	<0.001	7,27 [2,18; 24,17]	0,001
Score ≥ med (58.3)	3	186	1,00		1,00	
Social Relationship						
Score < med (58.3)	37	131	4,56 [2,33; 8,90]	<0.001	1,91 [0,96; 3,80]	0,064
Score ≥ med (58.3)	10	197	1,00		1,00	
Environment						
Score < med (56.3)	37	136	4,32 [2,21; 8,44]	<0.001	1,97 [1,00; 3,86]	0,050

Score ≥ med (56.3)	10	192	1,00	1,00

Source: Prepared by the authors.

According to FLECK et al. (2000), the psychological domain involves six facets, so the frequency distributions of the Bad/Dissatisfied QoL group were verified in each one: positive feelings (5.9% - none, 53.2% - very little, 36.0% - more or less, 4.3% - a lot, 0.6% - extremely); thinking, learning, memory and concentration (2.1% - not at all, 36.6% - very little, 51.1% - more or less, 10.2% - a lot); self-esteem (2.1% - none, 18.8% - very little, 50.5% - more or less, 25.3% - a lot, 3.23% - extremely); body image and appearance (9.7% - does not accept anything, 28.0% - accepts very little, 41.9% - accepts average, 18.3% - accepts a lot, 2.1% - accepts completely); negative feelings (8.6% - sometimes, 31.7% - often, 40.3% - very frequent, 19.4% - always); spirituality/religiosity/personal beliefs (11.3% - very dissatisfied, 44.6% - dissatisfied, 38.2% neither satisfied nor dissatisfied, 5.9% - satisfied).

Table 5, related to the Good/Satisfied QoL group, shows that only the social relationship domain did not present a significant adjusted prevalence ratio for the multiple Poisson regression analysis.

Table 5

Association between master's students in the QOL Good/Satisfied group and scores of the WHOQOL-bref domains greater than or equal to the median, with their respective crude and adjusted prevalence ratios, 95% confidence intervals, and pp values. Mato Grosso, Brazil, 2018

Domains	QOL Good/Satisfied		Prevalence ratio (Crude)		Prevalence ratio (Adjusted)	
	Yes (n = 116)	No (n = 259)	BPS [CI(95%)]	p-value	RPA [CI(95%)]	p-value
Physical						
Score < med (60.7)	21	148	1,00	<0.001	1,00	<0.001
Score ≥ med (60.7)	95	111	3,71 [2,42; 5,69]		2,36 [1,50; 3,72]	
Psychological						
Score < med (58.3)	28	158	1,00	<0.001	1,00	0,032
Score ≥ med (58.3)	88	101	3,09 [2,13; 4,50]		1,57 [1,04; 2,36]	
Social Relationship						
Score < med (58.3)	27	141	1,00	<0.001	1,00	0,061
Score ≥ med (58.3)	89	118	2,68 [1,83; 3,91]		1,47 [0,98; 2,20]	
Environment						
Score < med (56.3)	28	145	1,00		1,00	

Score ≥ med (56.3)	88	114	2,69 [1,85; 3,91]	<0.001	1.63 [1,09; 2,44]	0,017

Source: Prepared by the authors.

4 DISCUSSION

The relationship between health and quality of life has health status as a facilitator for the perception of positive or negative well-being. In the sample studied, 53.07% of the master's students had a positive perception, that is, they marked their health status as good or very good. However, less than half considered their quality of life as good or very good, and only 38% were satisfied or very satisfied with their health, results lower than those obtained by TEIXEIRA et al. (2017) who classified 55% of their sample of graduate students as satisfied with quality of life.

Regarding the position measures (mean and median) of the scores of the *WHOQOL-bref* domains, the sample obtained results close to those found in international studies (BULLAPPA and KENGNAL, 2016; GHAZANFAR et al., 2018) and national studies (TEIXEIRA et al., 2017; MENDES-RODRIGUES et al., 2019) for graduate students. Regarding the characteristics of the master's students, there was also similarity with the national studies, with emphasis on: being female (65.3%), not having children (87.7%), following a religion (73.1%), having a family income of up to R$ 8,000.00 (77.3%), receiving a scholarship (45.0%), not having an advisor (6.9%) and changing the initial theme of their research project (25.0%). Regarding lifestyle, 63.5% of the master's students reported consuming alcoholic beverages, and of these 30% consume a lot, only 13.9% are smokers and 42.7% do not practice physical activity.

The fact of following a religion, having a partner and being in the first year of the course are protective characteristics, that is, they significantly reduce the chance that the master's student will not perceive his or her health status as positive. Corroborating, COSTA and NEBEL (2018) pointed out isolation and lack of dialogue as one of the biggest complaints of graduate students, the fact of not having anyone to talk to about the problems/difficulties encountered during the course can cause enormous frustration and even anxiety. Usually during the period of the disciplines (first year), there is the presence of colleagues who do not let them feel so isolated, but then the presence of a partner and/or following a religion can avoid serious health problems.

On the other hand, the fact that the master's student does not exercise significantly increases the chance of not perceiving his health status positively. Since the practice of physical activity helps to restore health from the harmful effects that the work/study routine brings, resulting in an improvement in the quality of life parameters (SILVA et al., 2010). A significant association was also shown between the non-positive perception of the health

status and scores lower than the median in the physical domain, that is, not considering as positive the facets that constitute the domain (pain and discomfort; energy and fatigue; sleep and rest; activities of daily living; dependence on medication or treatments; work capacity) (FLECK et al., 200) ends up influencing the non-perception of their health status as positive.

In the extreme self-assessment groups referring to the first two questions of the *WHOQOL-bref*, the social relationship domain formed by the facets (personal relationships; social support; sexual activity) (FLECK et al., 2000) stands out, which was significant in both groups in the bivariate analysis, but ended up not remaining in the multiple Poisson regression analyses. Probably, the low number of master's students belonging to the extreme groups (QoL Good/Satisfied – 30.94% and QoL Poor/Dissatisfied – 12.53%) meant that the domain did not remain since, as previously mentioned, isolation and lack of dialogue compromise quality of life.

With the adjusted prevalence ratio being significant only between the Poor/Dissatisfied QoL group and scores lower than the median in the psychological domain, we chose to analyze the behavior of the master's students belonging to this group, in relation to the six facets that make up the psychological domain (FLECK et al., 2000). It is worth highlighting the facets positive feelings (59.1% - none/very little); negative feelings (59.7% - very frequent/always); spirituality/religiosity/personal beliefs (55.9% - very dissatisfied/dissatisfied) which presented the worst results, which may have exerted a great influence on the negative self-evaluation of the quality of life and health of the master's student. Another important facet that requires a lot of attention in the academic environment is thinking, learning, memory and concentration, where only 10.2% of the students belonging to the Poor/Dissatisfied QoL group said they had a lot.

On the other hand, the positive perception of the seven facets of the physical domain, the six facets of the psychological domain, together with the facets of the environment domain (physical safety and protection; home environment; financial resources; availability and quality of health and social care; opportunities to acquire new information and skills; participation and opportunities for recreation/leisure; physical environment/pollution) (FLECK et al., 2000) influence a positive self-assessment of the quality of life and health of the master's student, i.e., the Good/Satisfied QoL group showed a significant association with the physical, psychological and environment domains in the multiple Poisson regression analysis.

In view of the results found and aiming to reduce the risk factors found, some simple strategies that can be implemented in graduate courses can be mentioned: encourage group physical activity programs, such as dance, because in addition to muscle strength and weight

loss, it also collaborates with motivational therapy, social integration and improvement of self-esteem (MARBÁ et al., 2016). Create psychological care programs, such as the one proposed by LANTYER et al., (2016) based on the cognitive-behavioral approach, which help in the process of adaptation, permanence and development of autonomy and potential of master's students. As well as implementing specialized psychological care units, where graduate students can seek assistance when they perceive signs of mental suffering (COSTA and NEBEL, 2018).

The limitations of this research can be indicated as the cross-sectional design, the limitation of the number of factors, as it is understood that there is a greater number that can affect the quality of life of the master's students, the fact that it was carried out electronically, where normally the interest in participation stems from people who have problems in the subject to be researched (SOUZA; FADEL; FERRACIOLI, 2016) and as much as the *WHOQOL-bref* questionnaire is one of the most used instruments in research involving students' quality of life, it is limited by the fact that it is self-declared, and responses may occur that are congruent with the acceptable standards imposed by society (GALDINO et al., 2016). However, considering the subjective and dynamic personal characteristic of the concept of quality of life, even a longitudinal study could not cover all factors and particularities (CUNHA et al., 2017).

5 FINAL CONSIDERATIONS

In this study, it can be seen that more than half of the master's students considered their health status as positive, however, this percentage decreases when evaluating the positive perception in relation to quality of life and health as a whole. With scores lower than the median of the physical and psychological domains associated with no positive perception of health status and negative perception of quality of life and health, respectively, it is understood as necessary to adopt health promotion actions aimed at mentally and physically strengthening master's students in order to obtain an improvement in their quality of life and health.

Finally, it is noteworthy that the present study was developed in a single higher education institution, although it included master's students from different areas of knowledge. Such delimitation may restrict the generalization of the findings, since students from other universities and regional contexts may have different perceptions about quality of life, as well as different associated factors. In this sense, it is pertinent to carry out new studies in various scenarios, with the aim of deepening the understanding of this theme and

contributing to the development of more effective actions in the promotion of the health of master's students.

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