


## ANXIETY, DEPRESSION, STRESS AND SATISFACTION WITH THE ACADEMIC EXPERIENCES OF UNDERGRADUATE GERONTOLOGY STUDENTS

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## ABSTRACT

The present study aimed to identify the association between satisfaction with academic experiences and anxiety, depression and stress in undergraduate students in Gerontology. This was a descriptive, quantitative, and cross-sectional study. The sample was composed of students enrolled in the undergraduate course in Gerontology at the Federal University of São Carlos, divided into two groups, according to the median satisfaction with academic experiences, namely: (a) Group with high satisfaction with academic experiences (GAlta Satisfação): composed of students with satisfaction scores with academic experiences higher than the median, (b) Group with low academic satisfaction (GBaixa Satisfação): composed of students with satisfaction scores with academic experiences below the median. The instruments for data collection were: Student Characterization Questionnaire, Academic Experiences Questionnaire – Short Version (QVA-R) and Anxiety, Depression and Stress Scale (EADS-21). The data obtained were entered into a database in the Statistical Package for Social Sciences (SPSS) for Windows for statistical analysis. The sociodemographic profile of the undergraduate students in Gerontology was female, young, single, without children, from a favored social class, and dedicated exclusively to student activities. The total and dimensional scores of satisfaction with academic experiences were high and were above the midpoint of the scale. The dimension that presented the best score was the "institutional", followed by the "interpersonal" dimension. The dimensions with the lowest values were "personal" and "career" (in this order).

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Regarding emotional factors, the "stress" domain had the highest score, followed by the "depression" and "anxiety" domains. There was a significant association between satisfaction with academic experiences and anxiety, depression, and stress among undergraduate students in Gerontology. It was concluded that students with low satisfaction with academic life have more symptoms of depression, stress and anxiety.

**Keywords:** Satisfaction. Higher education. Gerontology. Stress. Depression. Anxiety.

## INTRODUCTION

Academic satisfaction consists of the subjective evaluation of the entire experience lived in the university context. Thus, it is the psychological state resulting from a confirmation or not of expectations with the academic reality. Knowledge about this construct is of fundamental importance, since dissatisfaction in university life is a source of suffering and stress. In the future, this dissatisfaction may have repercussions on life, professional future, the environment and work relationships (RAMOS *et al.*, 2015).

Entering the University is a life achievement. At the same time, it is a period with norms, pedagogical methodologies and unknown people, which requires adaptation. There is a diversity of factors that affect the process of student-university interaction. Castro (2017) highlights the fact of living far from family, the establishment of identity, academic and income responsibilities, the development of interpersonal relationships, issues of intimacy, vocational harmony and the performance of extracurricular activities. Thus, this period is full of idealizations and conflicts, especially in the early years of graduation (MARTINCOWSKI, 2013).

Academic life prepares students for the demands of society about their professional and civic performance. On the other hand, it requires effectiveness, adaptation to new situations, and the ability to deal with pressures and demands. Situations that require adaptation can be opportunities for growth and learning or factors capable of triggering emotional disorders, such as stress and depression (RIOS, 2006). Both stress and depression influence the academic production and performance of students, as they can affect the student's reasoning capacity, concentration, memorization, motivation and interest, leading to reduced performance and learning (BAPTISTA *et al.*, 1998; VASCONCELOS *et al.*, 2015).

Studies on stress, anxiety and depression among university students point to a high prevalence of these disorders. In a recent publication, Asif *et al.* (2020) described several studies on the prevalence of psychological disorders in university students around the world. The prevalence of anxiety, stress, and depression ranged from 27 to 74.2%, and the differences in the data are mainly due to the methodological diversity of the studies. However, regardless of the numerical variation, it is perceived that mental disorders are highly prevalent among students even considering the lowest published parameters.

The adverse effects and prevalence of mental disorders among university students justify research on the subject. Anxiety, depression, and stress are associated with

deleterious behaviors such as smoking, alcohol, medication, and drug abuse, poor diet, physical inactivity, poor sleep habits, lack of self-care, and social isolation (BEITER *et al.*, 2015; DOOM; HAEFFEL, 2013; VASCONCELOS *et al.*, 2015). In addition, it is known that the occurrence of mood disorders during the undergraduate period, when not screened and treated, can be perpetuated in the professional future. The psychic and emotional suffering of health students is not restricted to them, but also affects and impacts their relationship with other people, including in their care (COSTA *et al.*, 2012; LEÃO, 2018; VASCONCELOS *et al.*, 2015).

From this perspective, this study aims to verify whether there is an association between satisfaction with academic experiences and anxiety, depression and stress in undergraduate students in Gerontology.

## **METHOD**

### **DESIGN**

This is a descriptive, quantitative and cross-sectional study.

### **PARTICIPANTS**

The sample consisted of 36 students enrolled in the bachelor's degree course in Gerontology at UFSCar, divided into two groups according to the median satisfaction with their academic experiences. The Gerontology course at UFSCar has a minimum duration of four years, offers 40 vacancies per year and had the first class of freshmen in 2009.

Regarding the inclusion criteria for participation in the study, students should be regularly enrolled in the course, be in the second, third or fourth year, have answered all the questions of the data collection instrument after accepting the participation in a free and informed way.

The groups were named as follows: (a) Group with high satisfaction with academic experiences ( $G_{\text{High Satisfaction}}$ ), composed of students with satisfaction scores with academic experiences higher than the median; (b) Group with low academic satisfaction ( $G_{\text{Low Satisfaction}}$ ), composed of students with satisfaction scores with academic experiences below the median.

First-year students were not part of the sample, as the moment of adaptation related to entering university life and the particularities of the year of collection, in which academic

activities took place in a non-face-to-face format as a result of the COVID-19 pandemic, could lead to biases related to study variables.

## PROCEDURES FOR DATA COLLECTION

After approval of the research project by the Research Ethics Committee of UFSCar and authorization from the coordination of the Undergraduate Course in Gerontology of the aforementioned University, the researcher presented the research, its objectives and invited the students to participate in the study via e-mail. The students who accepted the invitation, by reading and accepting the Informed Consent Form, answered the instruments described in the item "Data collection instruments" that were sent through a Google *Forms link*. Data collection was carried out between May and July 2020.

## DATA COLLECTION INSTRUMENTS

### **Student Characterization Questionnaire**

It was designed to collect personal and sociodemographic data from students. To fill out the questionnaire, the following data were requested: sex (female or male), age (in years), ethnicity (white, black, brown, yellow, indigenous, other), occupational data (only studies or studies and works), student financing (never had; already had, but no longer has; currently has), failures (yes or no), marital status (single, married, widowed or separated), children (yes or no) and health problems (yes or no).

### **Questionnaire of Satisfaction with Academic Experiences**

Developed by Almeida, Soares and Ferreira (2002) and adapted to the Brazilian context by Lemos (2010). This instrument aims to evaluate the perception of higher education students about the experiences lived in the educational institution in which they are inserted, and addresses the following dimensions: personal, interpersonal, career, study and institutional. It is a self-report questionnaire, composed of 55 items with five answer options, ranging from 1 (nothing to do with me, totally in disagreement, never happens) to 5 (everything to do with me, totally in agreement, always happens), in which the higher the score obtained, the better the perception of academic experiences (ALMEIDA; SOARES; FERREIRA, 2002).

### **Anxiety, Depression and Stress Scale (EADS-21)**

Originally the *Depression Anxiety Stress Scale* (DASS) by Lovibond and Lovibond (1995), validated and translated into the Brazilian context by Vignola and Tucci (2014), it is a self-report instrument, composed of 21 items divided into three subscales, with seven items each, which assess depression, anxiety and stress. In each item, there is a sentence with four possible answers on a Likert-type scale. Respondents rate the symptoms experienced during the past week on a four-point scale ranging from "nothing has applied to me" to "it has applied to me most of the time." The EADS is aimed at people over 17 years of age and the results are based on the sum of the results of the items. The final score can be calculated for each subscale, where the minimum is "0" and the maximum is "21". The higher the score obtained, the greater the negative affective state (VIGNOLA; TUCCI, 2014).

### **ETHICAL ASPECTS**

The project was submitted to the Ethics Committee for Research with Human Beings at UFSCar (CEP) and approved by opinion No. 3.956.393, CAAE 27227119.6.0000.5504 on April 6, 2020.

### **DATA ANALYSIS PROCEDURES**

The data obtained were entered into a database in the *Statistical Package for Social Sciences (SPSS) for Windows* to perform: (1) Descriptive statistical analyses to characterize the sociodemographic profile and satisfaction with the academic experiences of undergraduate students in Gerontology; (2) Kolmogorov-Smirnov normality test; (3) Pearson's or Fisher's chi-square test to compare the groups (with high and low satisfaction with academic experiences) in relation to the proportions of the categorical sociodemographic variables; (4) Mann-Whitney test to compare the groups (with high and low satisfaction with academic experiences) in relation to continuous sociodemographic variables; (5) Mann-Whitney test to compare the groups (with high and low satisfaction with academic experiences) in relation to the variables depression, anxiety, and stress; (6) Spearman's correlation analyses identified a relationship between the dimensions of satisfaction with academic experiences (personal, interpersonal, career, study, and institutional) and anxiety, depression, and stress of undergraduate Gerontology students.

The level of significance adopted for the tests was 5% ( $p < 0.05$ ).



## **RESULTS**

### **CHARACTERIZATION OF UNDERGRADUATE STUDENTS IN GERONTOLOGY**

36 undergraduate students in Gerontology at UFSCar who entered between 2016 and 2020 participated in this study. Since 139 students were actively enrolled in the course and only 42 were in the first year (did not meet one of the inclusion criteria) and all the others (n=97) were invited and encouraged to participate in the research, adherence was considered low. The calculations indicated that this sample had a confidence level of 85% and a margin of error of 10.0% (calculation carried out using the Survey Monkey® platform, available at <https://pt.surveymonkey.com/mp/sample-size-calculator/#>).

The complete data on the sample profile as well as the descriptive analyses by group (with low and high satisfaction with academic experiences) are presented in Tables 1 and 2.

## **METHODOLOGY**

This topic deals with the materials and methodological tools used in this research, outlining the stages of execution clearly and comprehensively. The presentation follows a logical and chronological order, including the delimitation of the object of study and the characteristics of the conditions in which the work was conducted.

### **CHARACTERIZATION OF THE STUDY AREA**

36 undergraduate students in Gerontology at UFSCar who entered between 2016 and 2020 participated in this study. Since 139 students were actively enrolled in the course and only 42 were in the first year (did not meet one of the inclusion criteria) and all the others (n=97) were invited and encouraged to participate in the research, adherence was considered low. The calculations indicated that this sample had a confidence level of 85% and a margin of error of 10.0% (calculation carried out using the Survey Monkey® platform, available at <https://pt.surveymonkey.com/mp/sample-size-calculator/#>).

The complete data on the sample profile as well as the descriptive analyses by group (with low and high satisfaction with academic experiences) are presented in Tables 1 and 2.



Table 1 – Descriptive and comparative analyses of the characterization variables of undergraduate students in Gerontology according to satisfaction with academic experiences (n=36). São Carlos – 2020.

GROUPS	LOW SATISFACTION (n=18)		HIGH SATISFACTION (n=18)		TOTAL (n=36)		COMPARATIVE ANALYSIS BETWEEN THE GROUPS		
							<b>Mann-Whitney</b>		
<b>Variables</b>							<b>U</b>		<b>p</b>
<b>Age</b>							121,00		0,187
Average	20,39		23,33		21,86				
Median	20,50		21,00		21,00				
Standard deviation	1,33		9,12		6,60				
							<b>Fisher/Chi-Square Test</b>		
	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>n</b>	<b>%</b>	<b>F/X<sup>2</sup></b>	<b>Gl</b>	<b>p</b>
<b>Sex</b>							3,273	1	0,070
Female	18	100,0	15	83,3	33	91,7			
Male	0	0,0	3	16,7	3	8,3			
<b>Race/Color</b>									
White	12	66,7	15	83,3	27	75,0	3,789	-	0,393
Brown	4	22,2	2	11,1	6	16,7			
Negress	1	5,6	0	0,0	1	2,8			
Yellow	0	0,0	1	2,8	1	2,8			
Indigenous	1	5,6	0	0,0	1	2,8			
<b>Income</b>							0,790	-	0,928
Up to 2 MW	6	33,3	4	22,2	10	27,8			
From 3 to 5 MW	4	22,2	5	27,8	9	25,0			
More than 5 MW	6	33,3	7	38,9	13	36,1			
Don't know/answer	2	11,1	2	11,1	4	11,1			
<b>Marital status</b>							1,029	1	0,310
Never married/single	18	100,0	17	94,4	35	97,2			
Married/has a partner	0	0,0	1	5,6	1	2,8			
<b>Offspring</b>							1,029	1	0,310
There is none	18	100,0	17	94,4	35	97,2			
Has	0	0,0	1	5,6	1	2,8			
<b>Health problems</b>							1,333	1	0,248
There is none	12	66,7	15	83,3	27	75,0			
Has	6	33,3	3	16,7	9	25,0			

Table 2 – Descriptive and comparative analyses of the student variables of undergraduate students in Gerontology according to satisfaction with academic experiences (n=36). São Carlos – 2020.

GROUPS	LOW SATISFACTION		HIGH SATISFACTION		TOTAL		COMPARATIVE ANALYSIS BETWEEN THE GROUPS		
	n	%	n	%	n	%	Fisher test		
<b>Year of entry</b>							<b>10,153</b>	<b>-</b>	<b>0,027</b>
2016	1	5,6	0	0,0	1	2,8			
2017	1	5,6	6	33,3	7	19,4			
2018	1	5,6	5	27,8	6	16,7			
2019	6	33,3	4	22,2	10	27,8			
2020	9	50,0	3	16,7	12	33,3			
<b>Situation</b>							<b>4,874</b>	<b>-</b>	<b>0,106</b>
Studying normally	11	61,1	16	88,9	27	75,0			
Partially taking the courses	3	16,7	2	11,1	5	13,9			
Locked enrollment	4	22,2	0	0,0	4	11,1			
<b>Disapprovals</b>							<b>1,996</b>	<b>-</b>	<b>0,572</b>
Zero	15	83,3	15	83,3	30	83,3			
One	2	11,1	2	11,1	4	11,1			
Two	0	0,0	1	5,6	1	2,8			
Three	1	5,6	0	0,0	1	2,8			
<b>Purse</b>							<b>13,698</b>	<b>-</b>	<b>0,001</b>
It doesn't have/never had	14	77,8	9	50,0	23	63,9			
Scientific initiation	0	0,0	7	38,9	7	19,4			
Student Aid	4	22,2	0	0,0	4	11,1			
Other	0	0,0	2	11,1	2	5,6			
<b>Occupational situation</b>							<b>1,596</b>	<b>1</b>	<b>0,206</b>
Only study	16	88,9	13	72,2	29	80,6			
Study and work	2	11,1	5	27,8	7	19,4			
<b>Middle school</b>									
Public	10	55,6	6	33,3	16	44,4	<b>1,800</b>	<b>1</b>	<b>0,180</b>
Private	8	44,4	12	66,7	20	55,6			

This study sought to control the characterization variables through pairing analysis, i.e., the groups should present the minimum of significant differences related to these variables. This control minimizes the possibility of intervening variables leading to biases in the conclusions. Except for the variables "year of entry" and "scholarship", which presented significant expected differences, the comparative analyses pointed to similarities between the groups.

## SATISFACTION WITH THE ACADEMIC EXPERIENCES OF UNDERGRADUATE STUDENTS IN GERONTOLOGY: DESCRIPTIVE DATA

The descriptive data on satisfaction with the academic experiences of undergraduate students in Gerontology are presented in Table 3. It is noted that the total and dimension scores were high and were above the midpoint of the scale. The dimension

that presented the best index was the "institutional" dimension (M=4.20, SD=0.40), followed by the "interpersonal" dimension (M=4.04, SD=0.70). On the other hand, the dimensions with the lowest values were "personal" (M=3.07, SD=0.79) and "career" (M=3.74, SD=0.64).

Table 3 – Descriptive analyses of satisfaction with the academic experiences of undergraduate students in Gerontology (n=36). São Carlos – 2020.

Domains of Satisfaction with Academic Experiences	Descriptive Analytics				
	Average	Median	DP	Minimum	Maximum
Staff	3,07	3,14	0,79	1,43	4,79
Interpersonal	4,04	4,09	0,70	2,08	5,00
Career	3,74	3,79	0,64	2,67	4,83
Study	3,82	3,78	0,62	2,44	5,00
Institutional	4,20	4,25	0,40	3,25	5,00
Total Score	3,77	3,71	0,46	2,80	4,55
Standardized Personnel	61,47	62,86	15,86	28,57	95,71
Standardized Interpersonal	80,79	81,67	14,04	41,67	100,00
Standardized Career	74,82	75,84	12,85	53,33	96,67
Standardized Study	76,36	75,56	12,36	48,89	100,00
Standardized Institutional	83,96	85,00	7,98	65,00	100,00
Standardized Total Score	75,48	74,07	9,18	55,94	91,09

## ANXIETY, DEPRESSION AND STRESS OF UNDERGRADUATE STUDENTS IN GERONTOLOGY ACCORDING TO SATISFACTION WITH ACADEMIC EXPERIENCES

The descriptive and comparative data of the anxiety, depression and stress scores of the undergraduate students in Gerontology distributed according to satisfaction with the academic experiences are presented in detail in Table 5. It is worth noting that the total scores of the group with high satisfaction was 29.22 points (Md=24.00, SD=20.99, xmin=2.00, xmax=72.00) and of the group with low satisfaction was 60.44 points (Md=54.00, SD=34.45, xmin=40.00, xmax=120.00). This difference was significant (U=75.500; p=0.006), therefore, it can be stated that the group most satisfied with their academic experiences had lower anxiety, depression, and stress (Table 4). In the analysis by dimensions, the same differences are confirmed (Table 4).

Table 4 – Descriptive and comparative analyses of anxiety, depression and stress of undergraduate students in Gerontology according to satisfaction with academic experiences (n=36). São Carlos – 2020.

GROUPS	LOW SATISFACTION	HIGH SATISFACTION	TOTAL	COMPARATIVE ANALYSIS BETWEEN THE GROUPS	
<b>Domains</b>				<b>Mann-Whitney</b>	
				<b>U</b>	<b>p</b>
<b>Anxiety</b>				<b>87,500</b>	<b>0,018</b>
Average	8,50	4,00	6,25		
Median	7,50	2,50	4,00		
Standard deviation	6,34	4,07	5,72		
<b>Depression</b>				<b>68,500</b>	<b>0,003</b>
Average	10,56	4,61	7,58		
Median	10,00	2,00	6,00		
Standard deviation	6,29	4,97	6,35		
<b>Stress</b>				<b>72,500</b>	<b>0,005</b>
Average	11,17	6,00	8,58		
Median	11,00	6,50	8,00		
Standard deviation	5,60	3,20	5,20		
<b>TOTAL SCORE</b>				<b>75,500</b>	<b>0,006</b>
Average	60,44	29,22	44,83		
Median	54,00	24,00	38,00		
Standard deviation	34,45	20,99	32,27		

To complete, the correlation analyses between the domains of the instruments of this study showed that: (1) there is a significant, inversely proportional relationship of strong magnitude between the "personal" domain of the Academic Experience Scale and "anxiety", "stress" and "depression", as dimensions; (2) there is a significant, inversely proportional relationship of moderate magnitude between the "study" domain of the Academic Experience Scale and the "stress" and "depression" dimensions. Finally, there is also a significant, inversely proportional and moderate relationship between the general scores of satisfaction with academic experiences and those of the Anxiety, Depression and Stress Scale (Table 5).

This means that questions about dissatisfaction with academic experiences are related to anxiety, stress and depression in undergraduate students in the context studied.

Table 5 – Correlational analyses between the domains of the Anxiety, Depression and Stress Scale and the Satisfaction with Academic Experiences Scale (n=36). São Carlos – 2021.

Domains		Anxiety	Depression	Stress	Anxiety, Depression, and Stress total score
<b>Staff</b>	Rho	<b>-0,651</b>	<b>-0,868</b>	<b>-0,814</b>	<b>-0,827</b>
	p	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>	<b>0,000</b>
<b>Interpersonal</b>	Rho	-0,034	-0,107	-0,093	-0,034
	p	0,844	0,533	0,590	0,842
<b>Career</b>	Rho	-0,189	-0,273	-0,088	-0,139
	p	0,270	0,107	0,611	0,420
<b>Study</b>	Rho	-0,226	<b>-0,572</b>	<b>-0,350</b>	<b>-0,399</b>
	p	0,185	<b>0,000</b>	<b>0,036</b>	<b>0,016</b>
<b>Institutional</b>	Rho	-0,080	-0,151	-0,042	-0,065
	p	0,644	0,380	0,810	0,705
<b>Total Score of Satisfaction with Academic Experiences</b>	Rho	<b>-0,401</b>	<b>-0,521</b>	<b>-0,412</b>	<b>-0,429</b>
	p	<b>0,015</b>	<b>0,001</b>	<b>0,012</b>	<b>0,009</b>

## DISCUSSION

### CHARACTERIZATION OF UNDERGRADUATE STUDENTS IN GERONTOLOGY

The students evaluated were predominantly female and young – under 25 years old. Most were single, without children and dedicated exclusively to student activities. Family income was higher than that of the Brazilian population. In general, national and even international research, which describes the profile of university students, points to general characterization data similar to those found in this research (ARINÕ; BERDAGI, 2018; BRAZILIAN ASSOCIATION OF INTERNSHIPS – ABRES, 2020; ANÍSIO TEIXEIRA NATIONAL INSTITUTE OF EDUCATIONAL STUDIES AND RESEARCH – INEP, 2021; LEÃO et al., 2018; MAYAN; DIAS, 2020; MARTINS et al., 2019; MARTINS; AXE; VOSGERAU, 2021; HARBOR; SOARES, 2017; VIZOTTO; JESUS; MARTINS, 2017).

### SATISFACTION WITH THE ACADEMIC EXPERIENCES OF UNDERGRADUATE STUDENTS IN GERONTOLOGY: DESCRIPTIVE DATA

The total scores and by dimension of satisfaction with the academic experiences of undergraduate students in Gerontology were high and were above the midpoint of the scale. These high scores are well documented in the literature (CARDOSO; GARCIA;

SCHROEDER, 2015; CARLETO et al., 2018; FRENCH; FOX; ALMEIDA, 2007; LAMAS; AMBIEL; SILVA, 2014; SANTOS et al., 2013; TEIXEIRA; CASTRO; PICCOLO, 2007).

The dimension that presented the best index was the "institutional", followed by the "interpersonal" dimension. On the other hand, the dimensions with the lowest values were "personal" and "career". It is presumed that the positive perceptions about the "institutional" dimension were influenced by the qualities of the university where the study was carried out. Students feel virtuous in having won a place and being part of UFSCar, which is a public entity and recognized nationally and internationally for excellence in teaching, research and extension for more than 50 years. According to Nunes (2021, p. 19):

Different surveys and more recent rankings point to the Federal University of São Carlos (UFSCar) among the 10 largest and best Higher Education Institutions (HEIs) in Brazil. UFSCar stands out for its excellence in undergraduate and graduate teaching activities, research and innovation, diversity and inclusion. No less important, the extension is a hallmark of UFSCar. Throughout its 50 years, UFSCar has developed its extension vocation, integrating all the previously mentioned activities and giving back actions, services, products, and knowledge to society (NUNES, 2021, p.19).

Satisfaction with the institution depends on the type of entity in which the respondent is inserted. Traditional and public universities, where vacancies are usually more disputed, bring greater satisfaction to students when compared to private institutions (CARLETO et al., 2018; FRENCH; FOX; ALMEIDA, 2007; LAMAS; AMBIEL; SILVA, 2014; SANTOS et al., 2013). The "personal" dimension was the one with the lowest score. This fact was also described in the research of Teixeira, Castro and Piccolo (2007), Carleto et al. (2018), Santos et al. (2013).

The "career" dimension had the second lowest score. This result may be related to the fact that Gerontology is a new profession and brings some apprehension about the future and the job market. No articles were found on satisfaction with academic experiences, specifically of undergraduate students in Gerontology. However, studies with students from other courses, in general, reveal high satisfaction for the "career" dimension for consolidated professions such as Psychology, Administration, Law, Veterinary Medicine, Medicine, Nursing and Dentistry (CARDOSO; GARCIA; SCHROEDER, 2015; CARLETO et al., 2018; FRENCH; FOX; ALMEIDA, 2007; LAMAS; AMBIEL; SILVA, 2014; SANTOS et al., 2013; TEIXEIRA; CASTRO; PICCOLO, 2007).

The context in which this study was developed favors a good evaluation of the institutional dimension. Regarding the "interpersonal" dimension, according to Matta,

Lebrão and Heleno (2017) and Bardagi and Hutz (2012), the ties and perceptions of friendship and cooperation can favor the permanence of students in undergraduate courses, as well as reflect in better academic performance. This could justify the permanence of students in the course despite the relatively low scores in the "career" dimension.

## ANXIETY, DEPRESSION AND STRESS OF UNDERGRADUATE STUDENTS IN GERONTOLOGY ACCORDING TO SATISFACTION WITH ACADEMIC EXPERIENCES

The group of students with higher satisfaction with their academic experiences had lower anxiety, depression, and stress scores. In addition, an inversely proportional relationship between satisfaction with academic experiences and total EADS-21 scores was confirmed. These results were expected, because the initial hypothesis was that those who were more satisfied, adapted and inserted in the academic environment and activities related to student and professional life would have a lower number of psychiatric symptoms. On the other hand, a student dissatisfied with academic life would be more likely to show signs of depression, stress, and anxiety.

According to Hutz and Bardagir (2006) and Bardagi and Hutz (2010), the negative emotional experiences that lead to depression and anxiety are related to career indecision in young people – one of the dimensions of satisfaction with academic experiences. In addition, positive affects are generally related to satisfaction with the course and career in university students.

The studies that include the main variables of this study – satisfaction with academic experiences, anxiety, depression and stress, are still scarce and refer to different undergraduate courses. Given this finding, Arinõ and Bardagi (2018) justified their investigation and analyzed data from a sample of 640 undergraduate students, enrolled in different courses at Brazilian public and private higher education institutions.

With the application of the same instruments – QVA-r and EADS-21, Arinõ and Bardagi (2018) analyzed the relationships between anxiety, depression and stress and satisfaction with academic experiences and self-efficacy. The authors found results that are close to the data of the present investigation. The "personal" and "study" dimensions showed an inversely proportional and significant relationship with depression, stress, and anxiety. According to the authors, this relationship can be justified by the fact that the "personal" dimension encompasses perceptions of physical and psychological well-being,



as well as self-concept, autonomy, effectiveness and optimism. Because it involves emotional aspects, students with low scores in this dimension may be in a situation of psychological and mental health vulnerability, which makes them perceive their context and their experiences in a negative way. In addition, the "study" dimension, when perceived as inefficient, can lead to perceptions of lack of follow-up, poor time management, study pace out of step with colleagues, and insufficient work, which, in turn, causes damage to mental health and symptoms of stress, anxiety, and depression.

Saliba et al. (2018) evaluated 114 freshmen students of a Dentistry course offered at a Brazilian public university. Except "stress" with the "career", "study" and "institutional" dimensions, the authors described that there were significant and inversely proportional relationships between all dimensions of the QVA-r and EADS-21. However, the strongest correlations of magnitude were in line with those found in the present study: "personal" vs. "stress," "personal" vs. "anxiety," and "personal" vs. "depression."

For this discussion, only two scientific articles published with objectives and data collection instruments similar to those of the present research were located, they are the studies by Arinõ and Bardagi (2018) and Saliba et al. (2018). Thus, it is possible to state that the literature lacks studies related to satisfaction with academic experiences and anxiety, depression and stress. A literature review by Matta, Lebrão and Heleno (2017) reaffirms this need.

As limitations of the research, the cross-sectional methodological design stands out, which does not provide the opportunity to establish cause-and-effect relationships between the variables. In addition, from an invitation to participate in the research, a sample of a very small size was constituted. In this way, it is admitted that the results cannot be generalized. On the other hand, the significant results presented, added to the scarcity of studies with the same objectives, encourage the planning of larger and more sophisticated future studies.

## CONCLUSION

Given the proposed objectives, we present the following conclusions: (a) The sociodemographic profile of the undergraduate students in Gerontology in the sample was female, young, single, without children, from a favored social class and dedicated exclusively to student activities; (b) The "stress" domain had the highest score, followed by the "depression" and "anxiety" domain – which had the lowest score, (c) There is an

association between satisfaction with academic experiences and anxiety, depression and stress among undergraduate Gerontology students.

The research hypothesis was confirmed and we concluded that students who are more dissatisfied with academic life have a greater number of symptoms of depression, stress and anxiety.

This investigation is part of the set of works that contribute to expanding knowledge about mental health and satisfaction with academic experiences. The results of this study can support future investigations that will allow us to approach and plan programs that strengthen higher education institutions in terms of success, integration, permanence, achievement and health of their most valuable asset – the student.

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