ORIGINAL ARTICLE

Coping strategies adopted by students and professors in the COVID-19 pandemic context: a cross-sectional study

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ABSTRACT

Introduction: In face of the COVID-19 crisis, classroom activities at universities were interrupted in Brazil, following the guidelines of health agencies to minimize coronavirus contamination levels, with implications for students' and professors' mental health. **Objective:** To identify the coping strategies used by students and professors of a Brazilian university during the COVID-19 pandemic, as well as the associated sociodemographic and institutional/academic variables. **Methods:** A cross-sectional survey was carried out using an online questionnaire with questions on socioeconomic aspects and applying the Ways of Coping Scale. **Results:** 671 students and 231 professors from a public university in the south of Brazil enrolled in the study. Students and professors used more problem-focused coping strategies followed by searching for social support. Regarding the professors, the variables frequency of leaving home and gender were positively associated with the problem and emotion-focused strategies and religion/fanciful thought strategies, respectively. Regarding the students, women used predominantly emotion-focused and religious/fanciful thought strategies. Students aged 27 or more used more problem-focused and 18-20 and 21-26 years old used predominantly emotion-focused strategies. Living with family and leaving home for 8 days or more were associated with the religious/fanciful thought strategy. **Conclusion:** Attention should be given to gender, age, and frequency of leaving home, when planning mental health actions to foster the use of a wider range of coping strategies adopted by university students and professors throughout moments of developmental crisis, such as the ones that emerged across pandemics.

Keywords: COVID-19; pandemics; mental health; universities.

INTRODUCTION

Coronavirus Disease 2019 (COVID-19), a respiratory infection caused by the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2)[1], was officially declared a pandemic by the World Health Organization (WHO) on March 11th, 2020, becoming an international public health emergency[2]. In Brazil, the first case was registered on February 25th, 2020[3] and until June 14th, 2022, 31.5 million cases and 668,000 deaths were confirmed, according to data released by the Brazilian Ministry of Health.

Such context is causing significant impacts on people's health and behavior dynamics. As the virus has spread to different regions of the world, public health officials have emphasized the need to mitigate the disease spreading speed with actions to prevent contamination, such as social distancing and isolation[4,5]. These measures; however, may generate potential risk factors regarding mental health and, to reduce such effects, healthcare agencies suggest the implementation of some behaviors in people's routine[6,7], which relate to the establishment of coping strategies. Those are cognitive and behavioral efforts used by people to manage situations that generate stress, whose demands exceed the existing personal resources[8].

Considering the classifications for these strategies, there are coping strategies focused on: problems, emotion, searching for social support, and religion/fanciful thought. The first is an active strategy of approaching what is stressful, as problem-solving and planning, that is, the person engages him/herself to modify the problem or stressful situation, aiming to control or deal with the threat, damage or challenge. It also includes cognitive restructuring, such as the redefinition of the stressor element. The emotion-focused coping strategy aims to regulate the emotional response caused by the

problem/stressor that the person faces, which can happen through withdrawal or palliative attitudes about the stressing source (as a denying or an avoiding attitude). Search for social support refers to the adoption of supportive interpersonal relationships to solve stress-generating situations[9], and coping through religion refers to religious behaviors used to give comfort and reduce stress[10]. Fanciful thought, in the present study, adds to the religious coping strategy. It is considered the association between religious and mystical practices together with fantasies that something could have happened to avoid the existence of the problem[11].

In Brazil, classroom activities at universities were interrupted in March 2020, following the guidelines of health agencies to minimize coronavirus contamination levels, adding stressors caused by the pandemic to already existing elements in the university context, with potential implications for the student's and professors' mental health. In the Brazilian academic context, a study on the confinement impact on psychosocial behavior during the COVID-19 pandemic evidenced that students showed higher stress scores, depression signs, and lower resilience rates, while employees and professors had lower stress scores, depression signs, and higher resilience rates[12]. In addition, another Brazilian study found a weak, but positive correlation between university students' coping strategies and symptoms of depression, anxiety, and stress, indicating that the strategies adopted may not settle the best context to face the challenges imposed by the situations related to the pandemic[13].

Although the aforementioned studies shed light on some features of coping strategies in the academic context during the pandemic situation, in Brazil, to our knowledge, there are no studies investigating coping strategies related to both undergraduate students and professors under such circumstances, which reinforces the

importance of exploring the subject. This way, this study aimed to identify the coping strategies used by students and professors at a Brazilian university during the COVID-19 pandemic, as well as the associated sociodemographic and institutional/academic variables.

METHODS

Research characterization and design

This is an observational study with a cross-sectional design, carried out at a federal university located in the south of Brazil. This educational institution has ten campuses; it offers 90 undergraduate courses and 54 graduation courses. It had 13,841 students and 904 professors at the time of the research data collection.

Participants

All students, over 18 years old, and professors from the educational institution were invited to participate in this study. The inclusion criteria consisted of being formally involved with the university at the time of data collection and having access to the institutional e-mail. It was not necessary to perform a sample calculation because all students and professors were invited to participate.

Data collection

Data collection was carried out between April and May 2020 through the application of an online questionnaire using the *Google Forms* platform. The

questionnaire had questions related to 1) Sociodemographic data: gender, age group, and housing situation. 2) Institutional/academic data: (a) professors - campus, work status, other employment situations; (b) students - campus, carrying out academic activities during the pandemic, employment situation. 3) Background data on the pandemic: frequency of leaving home in the last month. 4) Ways of Coping Scale, adapted version[11]. This scale aims to evaluate the coping strategies against specific stressors and consists of 45 items that provide 5 response alternatives on a Likert-type scale with points arranged as follows: 1- I never do this; 2- I do this a little; 3- I sometimes do this; 4- I do this a lot, and 5- I always do this. The items correspond to the factors "Problem-focused coping", "Emotion-focused coping", "Coping based on religious practice / fanciful thought" and "Searching for social support". The variables mentioned in items 1, 2, and 3 were treated as categorical, except the age group variable, considered ordinal. The variables referred to in item 4 were treated as continuous.

After institutional and ethical approval, an email was sent to students and professors inviting them to participate in the survey and answer the questionnaire. This email had the link to the questionnaire, as well as the Informed Consent Form. Given the formal consent, the participants were directed to the research form and the time to answer the questionnaire was approximately 15 minutes.

Statistical analysis

The variable referring to the class to which the individual belongs (student or professor) was used to organize the comparison groups. Descriptive analyses were

developed for all variables and their absolute frequencies and percentages were presented in comparison to the total.

Ways of Coping Scale data considered the outcomes studied, regarding each of the four scale categories (problem-focused coping, emotion-focused coping, coping through religious practice/fanciful thought, searching for social support) listed as outcome variables. The Shapiro-Wilk test was used to verify that the outcome variables have a normal distribution. Bivariate analyses were performed to verify the association between each independent variable (sociodemographic data, institutional/academic data, and contextualization data) and the preferred outcomes. When the variables were of the dichotomous type, a T-test was applied, and for the polytomous variables, the analysis of variance was used. The relationship between the independent and dependent variables was previously checked through the scatter plot.

Multivariate analyses were performed aiming to verify the influence of each independent variable, controlling other potentially confounding factors, regarding the four outcomes. Since the population of students and professors have different characteristics about age, work situation, and activities performed, with specifically collected data for each of them, the multivariate analyses developed considered sometimes only professors, and sometimes only students.

This way, four multivariable models were developed (one for each outcome) for each group (students and professors), totaling 8 analyses. All independent variables listed were included in the multivariate models. The method used was the multivariable linear regression, since the outcomes used were numerical variables. For all multivariate models, the graphics of the residuals (standardized residuals versus standardized predicted values) were analyzed to verify the homoscedasticity of the data, and the

histogram graphic of the residuals to verify their normal distribution. In addition, the interaction between variables was investigated, establishing a statistically significant value of 0.1 or below to include in the model. To verify the fit quality of the multivariate linear models, the likelihood ratios were analyzed (negative high values indicate a better fit).

The data obtained with the form were tabulated and organized in a Microsoft Excel spreadsheet - version 2016. Then, they were statistically analyzed using the software Statistical Package for Social Sciences (SPSS) - version 22.0. In all analyses, the level of significance (alpha) considered was 0,05.

Considerations and Ethical Aspects

This study was approved by the institutional Research Ethics Committee, number 4.258.187. All participants signed the Informed Consent Term where the confidentiality of information was guaranteed. All researchers committed to maintaining the confidentiality and privacy of the participants' registers.

RESULTS

The research sample consisted of 902 participants, 671 were students (74.4%) and 231 were professors (25.6%). Female participants had a higher prevalence, in the group of professors (62.8%) and students (69.3%), for the participants whose household was with family members (81% and 77% for professors and students, respectively), and for those whose frequency of leaving home during the pandemic was up to 7 days a month (54.1% for professors and 55.1% for students) (Table 1). The most frequent age groups among the professors were between 36 and 40 years and 46 years or more, with 27.7%

for both, as well as the 40-hour work status with exclusive dedication (90.5%). Regarding students, the most frequent age group was between 21 and 23 years old (30%). In addition, 64.8% of students continued to develop academic activities during the pandemic and 74.2% reported that they do not work.

Both professors and students predominantly used the problem-focused coping strategy and search for social support (means 3.76 and 3.17, respectively, considering the professors; and means 3.37 and 2.97, respectively, considering the students). The four outcome variables show normal distributions in both the professor's and the student's groups (Shapiro-Wilk test ≥0,10 in all analyses). The comparison between students and professors, regarding the strategies used to deal with the pandemic, showed statistically significant differences in the four categories ($p<0.001$) (Figure 1). In addition, professors used more strategies focused on the problem and seeking social support, and fewer strategies focused on emotion and religious/fantasy thinking when compared to students.

Regarding the group of professors, the gender variable was associated with religion/fanciful thought ($p<0.001$), with higher means for women (Table 2). When analyzing the group of students, the gender variable showed a statistically significant association with emotion-focused coping outcomes ($p<0.001$) and religion/fanciful thought ($p<0.001$), showing higher means for women in comparison to men. The variable age showed an association with the problem-focused coping outcome ($p<0.001$) and emotion ($p<0.001$), with higher means in the categories 27 years old or more, 21 to 26 years, and 18 to 20 years, respectively. In addition, the residence situation during the pandemic was associated with the religious/fanciful thought coping outcome ($p<0.001$).

The multivariate analysis performed with the sample of students is in Table 3, whose model presented data homoscedasticity, normal distribution of the residuals, and

no existence of interaction between the predictor variables. Considering the problem-focused coping outcome, it was shown that the variable age showed statistical significance (p<0.001), demonstrating that younger ages have a reduction in their coefficients when compared to the 27 years or older category (Table 3). Academic activities also showed an association (p=0.049) with an increase in the coefficient for those who kept them during the pandemic (b=0.103). Regarding the emotion-focused coping outcome, men showed a reduction in the coefficient in comparison to women p<0.001; b= -0.212 and an increase in the coefficients for the age groups from 18 to 20 years old (p=0.016; b=0.181) and 21 to 26 years old (p=0.001; b=0.224) in comparison to subjects aged 27 years old or more. For the religion / fanciful thought coping outcome, it is clear that the variables gender, frequency of leaving home, housing situation, and age showed statistical significance. Men showed a reduction in the coefficient about women (b= -0.368), leaving home for up to 7 days in the month also showed a decrease in the coefficient (b= -0.196) compared to leaving 8 days or more and living with the family increased the coefficient (b=0.253) about those who live alone. Finally, in the analysis of the search for social support coping outcome, only the variable gender was associated (p=0.018), showing a reduction in the coefficient for men when compared to women (b= -0.149).

The same multivariate linear regression analysis was performed for the sample of professors (Table 4). Similarly, the students' model, this presented data homoscedasticity, normal distribution of the residuals, and no interaction between the independent variables. The results show that, for the problem-focused coping outcome, the variable frequency of leaving home presented statistical significance (p=0.004), and individuals who left up to 7 days in the month obtained a reduction in the coefficient (b= -0.210). Considering

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the emotion-focused coping outcome, it is clear that men and individuals up to 35 years old showed an association with this outcome, with a reduction (b= -0.208) and an increase (b=0.218) of the coefficients, respectively, when compared with the reference categories. Regarding the religion/fanciful thought coping outcome, gender, and housing situation, they showed a statistically significant association (p<0.001 for both variables). Men obtained a reduction in their coefficient (b= -0.449) about women and, for people living with friends, there was an increase in the coefficient (b=0.626) about those who live alone. For the search for social support coping outcomes, no statistically significant association was observed.

DISCUSSION

The study analyzed the coping strategies used by students and university professors to face the COVID-19 pandemic. Our results showed that students and professors used more problem-focused coping strategies followed by searching for social support. Regarding the professors, the variables frequency of leaving home and gender were positively associated with the problem and emotion-focused strategies and religion/fanciful thought strategies, respectively. Regarding the students, women tended to use predominantly emotion-focused and religious/fanciful thought strategies. Living with the family and leaving home for 8 days or more were associated with the religious/fanciful thought strategy.

Regarding the obedience to recommendations of public health agencies during the pandemic, around 60% of the students reported not leaving their homes or leaving them for up to 7 days throughout the previous month. A study with university students in the

United States, in the pandemic context, indicated that 54% decreased their interaction with other people, suggesting a reduction in personal social interaction[14].

Younger students were the majority of the respondents in the study. Research carried out with students in France during the COVID-19 pandemic also observed greater participation of young individuals, aged between 19 and 20 years[15]. In addition, when considering the general population in a survey that verified psychological damage and coping strategies during the SARS-CoV-2 pandemic in Pakistan, the average age of respondents was 21.7 years old[16].

Results evidence that professors and students used more problem-focused strategies followed by the search for social support. These results are in agreement with other authors who also demonstrated the predominance of adopting the problem-focused strategy to deal with the pandemic among American academics[14] and Polish ones[17].

The present research findings identified that professors use more problem-focused strategies than students. Considering the professors, a survey conducted in Brazil that evaluated the psychosocial impact of confinement for members of a university community, revealed that the most used strategy in the pre-pandemic and pandemic scenarios was the problem-solving strategy. Such a study also showed the predominance of professors using problem-focused coping strategies when compared to students, which was associated with lower scores of perceived stress, depressive signs, and higher resilience scores. These results suggest that the referred strategy can denote better indexes related to mental health during the pandemic period[12].

Regarding the students' age group, results report that the lower the age; the more problem-focused strategy is used than the emotion-focused strategy. In line with this result, a survey with students from Pakistan showed that participants under the age of 20

had significantly lower scores for planning-focused coping than those over 26 years old[16]. Moreover, a study with Brazilian undergraduates during the pandemic evidenced that the younger the students, the greater the use of confrontation, acceptance of responsibility, and escape (that somewhat relates to emotion-focused strategy), and the older the students, the greater adoption of problem-solving and positive reevaluation coping strategies (that somewhat relate to problem-focused strategy)[13]. Professors, as well as students, also demonstrated that younger age (up to 35 years) is associated with greater use of the emotion-focused strategy.

Hence, it is important to understand the existence of a timeline to construct maturity to deal with adverse events in life. As the trajectory in the human development timeline advances, the broader the resources built to deal with difficulties become. Assuming that the use problem-focused strategy implies the existence of a proactive and autonomous posture to handle life's challenges, it is coherent to think that older, more experienced people, with more cognitive and affective resources to deal with adversity, use this strategy more frequently when compared to younger ones.

Considering the investigated students, some variables showed statistically significant associations with the mentioned coping categories. It was observed that women use more emotion-focused, religious/fanciful thought and the search for social support strategies in comparison to men. These results are by studies[16,17], and are supported by evidence that women tend to search for help and family support more frequently, as well as expressing their feelings is something easier for them when compared to men[18].

For the population of professors investigated, the same trend was observed, since men also use fewer strategies focused on emotion and religion compared to women.

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Studies that investigated the relationship between stress and coping have shown that female professors use more emotion-focused coping strategies[19,20]. However, male professors make greater use of aspects related to planning for the future, thinking about the situation, and setting goals, that is, actions aimed at solving problems[20]. Developmental processes associated with socialization patterns and contexts commonly attended by men and women may be implicated in this differences[21].

Moreover, results indicate that students who kept academic activities during the pandemic, during the period that these activities were interrupted on the campus, often used the problem-focused coping strategy. The use of this strategy was a positive predictor for adaptation to higher education[22]. Based on this finding, it is understood that the student involved in academic activities potentially promoted the use of the problem-focused coping strategy because research project activities and projects related to offering resources and help to the external community did not cease in this period.

Academics who live with their families use the strategy focused on religion/fanciful thought more remarkably when compared to those who live alone. We hypothesize that can be related to the results of the study by Kamaludin et al.[23], according to which students who stayed in their families' homes during the pandemic period practiced more the humanitarian work strategy when compared to the other students. Both the strategy focused on religion and the use of humanitarian work may be considered similar, to some extent, as they imply prerogatives to focus on otherness, build solidarity movements and give oneself to the other.

Finally, students who left their homes less frequently used less focused on religion/fanciful thought strategies about individuals who left home eight or more times per month. It may be hypothesized that people who less frequently used religion/fanciful

thought coping strategies may have the understanding that they depend on their concrete actions to effectively build a scenario of greater protection/less risk of contamination by the virus. It is coherent to assume that people who did not use this strategy so much, that is, who did not base their actions on the understanding that there would be protection from a Higher Being (religiosity) or that nothing would happen to them (fanciful thought), have remained longer in the domestic environment, as a protective measure against contamination.

Professors and students who left home up to 7 days a month used the problem-focused strategy less. "Staying at home" may have promoted a movement of "withdrawal" from an emotional point of view. Considering this first moment of the pandemic, the process of "psychological working out" to deal with reality was the focus, being resources and actions directed to the external reality which made the problem-focused strategy use less frequent.

This study addresses a scarcely explored reality in scientific productions related to coping with difficulties arising from the COVID-19 pandemic in the university scenario, especially regarding the context of coping strategies used by professors. Based on the present study results, it may be concluded that both professors and students used more problem-focused coping strategies, followed by searching for social support, strategies focused on religious/ fanciful thought, and, finally, emotion-focused strategies.

The research addresses the experiences of members of a university that is multicampus and contemplates a specific region of Brazil, a country of continental size. Furthermore, the study's cross-sectional character and the data collection period, limited to the initial moment of the pandemic, with the suspension of classroom activities, are elements to be considered for the results' contextual understanding. Regarding the

instrument used to approach the coping strategies, it is indicated that the four subscales proposed by the Ways of Coping Scale are unable to fully contemplate the coping spectrum. In this sense, longitudinal studies, in different institutional contexts, that use instruments with greater specificity to identify coping strategies may offer conditions to compare a wider spectrum of coping strategies and associated factors in different institutional contexts and different pandemic moments.

Coping strategies should be considered dynamic and influenced by personal and contextual factors so that for the same individual, different scenarios and moments in the development life cycle would require the use of different strategies, and possibly, more than one strategy at the same time. Moreover, coping strategies do not refer solely to the university environment but must be understood in other contexts, such as the domestic one. Once the complexity of the interaction of such factors is considered, results and discussions presented in this study may support institutional policies and actions to promote the planning and execution of mental health interventions for students and university professors.

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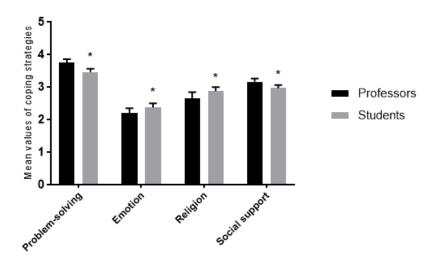
Figure 1: Comparison between professors and students regarding the coping strategies used. Data are expressed as mean ± S.D. *p value <0.001 when applying the Student's T-test for independent samples to compare professors and students.

Table 1: Sociodemographic and academic characteristics among the groups of professors and students

Variables	Professors		Students	
	Frequency	%	Frequency	%
Gender				
Male	85	36.8	205	30.6
Female	145	62.8	465	69.3
Ignored	1	0.4	1	0.1
Professors age group				
Less than 30 years	11	4.8	-	-
30 to 35 years	48	20.8	-	-
36 to 40 years	64	27.7	-	-
41 to 45 years	44	19	-	-
46 years or more	64	27.7	-	-
Students age group				
18 to 20 years	-	-	182	27.1
21 to 23 years	-	-	201	30.0
24 to 26 years	-	-	106	15.8
27 to 29 years	-	-	41	6.1
30 years or more	-	-	141	21.0
Living with				
Family	187	81.0	517	77.0
Friends	2	0.9	81	12.1
Alone	42	18.2	73	10.9
Professors work type				
20 hours	15	6.5	-	-
40 hours	7	3	-	-
40 hours full-time basis	209	90.5	-	-
Professors other employments				
Yes	8	3.5	-	-
No	223	96.5	-	-
The student has university activities				
Yes	-	-	435	64.8
No	-	-	236	35.2
The student has a job				
Yes	-	-	173	25.8
No	-	-	498	74.2
Frequency of leaving home				
Never	12	5.2	54	8
Until 7 days	125	54.1	370	55.1
Between 8 and 15 days	58	25.1	126	18.8
Between 16 and 21 days	20	8.7	55	8.2
Between 22 and 30 days	16	6.9	66	9.8

Table 2: Bivariate analyses associating sociodemographic and academic variables with the coping outcomes.

Variables	Coping strategies							
	Problem-solving		Emotion		Religion		Social support	
	Average (SD)	*p*-value	Average (SD)	*p*-value	Average (SD)	*p*-value	Average (SD)	*p*-value
Professors								
Gender[1]								
Male	3.73 (0.59)	0.576	2.06 (0.57)	0.006	2.37 (0.71)	<0.001	3.08 (0.70)	0.091
Female	3.78 (0.49)		2.29 (0.60)		2.82 (0.79)		3.23 (0.62)	
Age group[2]								
Until 35 years	3.7 (0.54)		2.31 (0.60)		2.77 (0.58)		3.24 (0.59)	
36 to 40 years	3.75 (0.46)	0.664	2.27 (0.63)	0.075	2.55 (0.86)	0.316	3.07 (0.64)	0.418
41 to 45 years	3.76 (0.60)		2.14 (0.58)		2.76 (0.82)		3.25 (0.62)	
46 years or more	3.82 (0.54)		2.06 (0.55)		2.58 (0.86)		3.15 (0.73)	
Living with[2]								
Family	3.75 (0.51)		2.18 (0.59)		2.62 (0.79)		3.14 (0.66)	
Friends	3.66 (0.15)	0.703	2.3 (0.61)	0.551	3.57 (0.20)	0.124	3.1 (0.14)	0.452
Alone	3.82 (0.62)		2.29 (0.61)		2.78 (0.81)		3.29 (0.61)	
Frequency of leaving home[1]								
Until 7 days	3.68 (0.50)	0.006	2.24 (0.58)	0.259	2.64 (0.81)	0.826	3.15 (0.67)	0.495
8 days or more	3.87 (0.56)		2.15 (0.61)		2.67 (0.77)		3.21 (0.63)	
Students								
Gender[1]								
Male	3.50 (0.63)	0.450	2.24 (0.66)	<0.001	2.63 (0.83)	<0.001	2.86 (0.74)	0.009
Female	3.46 (0.62)		2.45 (0.69)		2.99 (0.81)		3.02 (0.74)	
Age group[2]								
18 to 20 years	3.42 (0.59)		2.43 (0.68)		2.88 (0.88)		3.07 (0.73)	
21 to 23 years	3.34 (0.63)	<0.001*	2.45 (0.70)	0.001*	2.80 (0.81)	0.067	2.87 (0.72)	0.046
24 to 26 years	3.40 (0.64)		2.45 (0.65)		2.79 (0.80)		3.05 (0.69)	
27 years or more	3.69 (0.60)		2.21 (0.69)		3.01 (0.83)		2.95 (0.78)	
Living with[2]								
Family	3.49 (0.62)		2.37 (0.69)		2.95 (0.83)		2.98 (0.73)	
Friends	3.42 (0.63)	0.333	2.45 (0.67)	0.668	2.60 (0.77)	<0.001[3]	2.97 (0.77)	0.788
Alone	3.38 (0.62)		2.39 (0.74)		2.65 (0.87)		2.92 (0.74)	
Frequency of leaving home[1]								
Until 7 days	3.44 (0.62)	0.115	2.39 (0.68)	0.719	2.81 (0.84)	0.008	2.99 (0.75)	0.471
8 days or more	3.52 (0.62)		2.37 (0.71)		2.99 (0.82)		2.95 (0.72)	
Has university activities[1]								
Yes	3.15 (0.57)	0.048	2.35 (0.70)	0.135	2.86 (0.84)	0.494	2.99 (0.72)	0.464
No	3.40 (0.70)		2.44 (0.67)		2.91 (0.84)		2.95 (0.77)	
Has a job[1]								
Yes	3.60 (0.63)	0.002	2.28 (0.70)	0.020	2.93 (0.79)	0.295	2.97 (0.76)	0.935
No	3.42 (0.62)		2.42 (0.68)		2.86 (0.85)		2.97 (0.73)	

Statistical significant values were considered if the p-value is equal to or less than 0,001 due to correction for multiple comparisons. [1] Student's T-test for independent samples performed; [2] Analysis of variance performed; [3] statistical significance between the categories living with family vs friends and living with family vs alone; *statistical significance among category 27 years or more compared to all the others.

Table 3: Multivariate linear regressions associating sociodemographic and academic variables with coping outcomes among students.

Variables	Problem-solving LR = -617.721		Emotion LR = -690.039		Religion LR = -805.254		Social support LR = -746.411	
	coefficient b	p-value	coefficient b	p-value	coefficient b	p-value	coefficient b	p-value
Gender								
Male	0.035	0.502	-0.212	<0.001	-0.368	<0.001	-0.149	0.018
Female	1		1		1		1	
Frequency of leaving home								
Until 7 days	-0.023	0.654	-0.047	0.427	-0.196	0.003	0.028	0.667
8 days or more	1		1		1		1	
Living with								
Family	0.114	0.125	-0.057	0.514	0.253	0.014	0.02	0.827
Friends	0.105	0.279	-0.023	0.835	-0.066	0.601	0.001	0.993
Alone	1		1		1		1	
Age group								
18 to 20 years	-0.233	<0.001	0.181	0.016	-0.122	0.194	0.112	0.187
21 to 26 years	-0.305	<0.001	0.224	0.001	-0.161	0.043	-0.014	0.853
27 years or more	1		1		1		1	
Has university activities								
Yes	0.103	0.049	-0.085	0.118	-0.037	0.575	0.044	0.468
No	1		1		1		1	
Has a job								
Yes	0.067	0.282	-0.067	0.322	-0.031	0.685	0.036	0.642
No	1		1		1		1	

LR - likelihood ratio

Table 4:- Multivariate linear regressions associating sociodemographic and academic variables with coping outcomes among professors.

Variables	Problem-solving LR = -176.395		Emotion LR = -201.391		Religion LR = -262.359		Social support LR = -225.398	
	coefficient b	p-value	coefficient b	p-value	coefficient b	p-value	coefficient b	p-value
Gender								
Male	-0.082	0.280	-0.208	0.011	-0.449	<0.001	-0.162	0.074
Female	1		1		1		1	
Age group								
Until 35 years	-0.125	0.195	0.218	0.037	0.11	0.398	0.064	0.585
36 to 45 years	-0.064	0.441	0.158	0.087	0.049	0.705	0.001	0.994
46 years or more	1		1		1		1	
Living with								
Family	-0.078	0.441	-0.118	0.22	-0.173	0.205	-0.133	0.211
Friends	-0.076	0.604	-0.157	0.647	0.626	<0.001	-0.225	0.050
Alone	1		1		1		1	
Frequency of leaving home								
Until 7 days	-0.210	0.004	0.047	0.563	-0.112	0.280	-0.099	0.224
8 days or more	1		1		1		1	

LR - likelihood ratio