

CHAPTER 104

Relationship between anxiety and coping styles before exams in psychology students

 [10.56238/pacfdnsv1-104](https://doi.org/10.56238/pacfdnsv1-104)

Sharon Polo Herrera

Psychologist. Metropolitan University. Barranquilla

Ariadna Castaño Gutiérrez

Psychologist. Metropolitan University. Barranquilla

Lizeth Julio Palacio

Psychologist. Metropolitan University. Barranquilla

Andrea Barros Jaraba

Psychologist. Metropolitan University. Barranquilla

Miguel Montañez Romero

Candidate for Doctor Applied Cognitive Neuroscience. University of the Coast. Magister Psychoneuropsychiatry and Rehabilitation. Metropolitan University. Psychologist
E-mail: miguel.montanez@unimetro.edu.co

Maria Jose Orozco Santander

Psychologist, Magister Psychoneuropsychiatry and Rehabilitation. Metropolitan University

ABSTRACT

Anxiety as a psychological phenomenon tends to influence different life scenarios of individuals, generating alterations in their performance. The identification of this and how to deal with it can become very important in the educational sector,

especially in how it manifests itself before the presentation of exams and how students face it, which is why we sought to identify the levels of anxiety and the Coping styles of a group of psychology students before the exams of a private university in Barranquilla. Colombia. The COPING Strategies scale was applied for coping strategies and the AMAS-C scale for test anxiety. The methodology is quantitative, with a transversal descriptive level. A stratified random sampling of psychology students from II to X semester 2020-2 was carried out, for a sample of 133 selected students. The results show that the levels of anxiety before the exams were 33% clinically significant anxiety, 33% mild anxiety, 22% total anxiety and 22% presented levels of clinically significant extreme anxiety, with respect to coping styles 100%. of the sample uses the expression of coping difficulty (EAD). In conclusion, it can be shown that carrying out an activity such as exams tends to generate an emotional response in all students, in the same way, regardless of the degree of anxiety that may occur, in general, the main response of coping style will be the of expressing the difficulty towards others as a means of escape.

Keywords: Anxiety, coping styles, COPING scale, AMAS-C scale.

1 INTRODUCTION

At present, a term that is often used frequently when referring to states of mind is anxiety, with greater emphasis on those situations that by their nature can generate unpleasant states, experienced as restlessness, restlessness, among others. In the same way, this is usually mentioned and understood as a disorder or disorder that generates a global feeling of apprehension and concern (Melgosa, 2019), which all of us can experience at different times in our lives. University students, due to their multiple occupations, tend to be a population prone to being exposed to situations that can be considered of high emotional impact, such as exams.

In relation to this topic of anxiety and students, we have that the research that has been carried out has revolved around several aspects, among which we have anxiety before exams and physiological anxiety, where the first; It is defined as the tendency to respond with anxiety in situations of assessment of skills

and knowledge, whose central aspect is concern about possible poor performance in the exam or damage to the self-esteem of students (Torrano, Ortigosa, Riquelme and López, 2017), where the subject experiences symptoms that generate attention distraction, generating negative thoughts or recurrent automatic thoughts, preventing adequate reasoning before the test, on the other hand, the second, with respect to physiological anxiety, based on conception of anxiety and the physiological component, these are invariably related to changes and physiological activation of an external type (sweating, pupillary dilation, tremor, muscle tension, facial pallor, among others), internal (acceleration of heart and respiratory rates, decrease in salivation, among others), and involuntary or partially voluntary (palpitations, tremor, vomiting, fainting yes, among others). These alterations are subjectively perceived as unpleasant and help shape the subjective state of anxiety (Labrador, 2014).

On the other hand, another aspect in relation to the research that has been developed concerns the coping styles most used by students in situations that generate anxiety. Coping styles are the personality predispositions that transcend the influence of the situational context and time, these personal predispositions are what determine the use of certain coping strategies, which are the concrete and specific processes that are used in each context, and they can be changing depending on the triggering situations (Espinoza, Guamán and Sigüenza, 2018), in the same way coping is part of the range of psychological and personal resources of the subject, involving the levels of quality of life.

At the international level, research has been found, such as one carried out in Lima, where the population of university students presented about anxiety before exams that 52.4% of the population exhibit a moderate level of anxiety and 26.5% in the level high indicating that most college students experience worrying cognitive responses before or during the exam. Likewise, regarding the physiological reactions dimension, it was observed that 49.2% of the students surveyed are at the average level, which shows that the majority of the students show responses produced in the body during the evaluation (Maldonado and Zenteno, 2018).

In the national field, an investigation carried out in Medellín was found, where the predominant levels of anxiety were analyzed, they found that 36% of the participants presented levels of anxiety in maximum degree, followed by Level 2, minimum to moderate anxiety with 28%. , about half of the students have high levels of anxiety. Regarding the coping strategies variable, it was found that students tend to use problem-solving, positive reappraisal, search for social support and cognitive avoidance strategies more frequently. (Castellanos, Guarnizo and Salamanca, 2011)

At the local level we have the study carried out by Ávila, Hoyos, González & Cabrales (2011) where; the physiological manifestations were reported by 18.5% of the participants, the motor manifestations reached an identical average to the physiological ones, with 18.5% prevalence, these being the most serious expressions of anxiety in the sample, the results obtained allowed us to observe that precisely the The appearance of worries is the most frequently identified symptom among university

students (76.5%), followed in order by the appearance of fear (47%), as well as the development of negative thoughts and feelings.

All this panorama allows to show that there is a problem regarding the levels of anxiety managed and its manifestations by university students, such as the different coping strategies, for which we have set as an objective to find the relationship between anxiety and styles. coping before exams in psychology students from II to X semester.

2 METHOD

The research was framed in a quantitative approach, of a descriptive type, with a transversal scope of correlational cut.

The chosen population was all the students from (II to X) semester of the psychology program of the Metropolitan University enrolled in this program in the period 2020-2.

The following were taken into account in the selection criteria for choosing the sample:

Inclusion criteria: 1) Students over 18 to 22 years old, 2) Psychology students, 3) Students from II to X semester, 4) Psychology students who wanted to take part in the study, 5) Psychology students who do not have with a history of psychiatric illness.

The exclusion criteria were: 1) Students under 18 years of age, 2) Students from other faculties, 3) First semester students, 4) Psychology students who did not want to take part in the study, 5) Psychology students who have history of psychiatric illness.

The sample was obtained by means of a non-probabilistic sampling by conglomerate, obtaining $n=133$. For the exclusion criteria, the presence of a history of psychiatric illnesses and the refusal to participate in the research by not signing the informed consent were taken into account.

The variables to take into account in this characterization are fundamental, such as Anxiety and Coping Styles, these have gone through a process of analysis, supported by quantitative information in order to respond to how anxiety and coping styles are related. before the exams.

For the selection of the sample of psychology students from II to X semester, a non-probabilistic conglomerate type sampling was used, which allowed taking a significant amount of each of the semesters involved in the study, as a result obtaining a total of 133 students participating in the research.

For the evaluation of Anxiety, the Manifest Anxiety Scale for University Students (AMAS-C) was used. It is made up of 49 items, contains four anxiety scales and one of validity. The IHS (Restlessness/Hypersensitivity) subscale consists of 12 items. The SOC (Social Concerns/Stress) subscale has 7 items. The third subscale of the AMAS-C is called FIS (Physiological Anxiety), which comprises eight items that reflect the physiological manifestations of anxiety. The fourth anxiety subscale of the AMAS-C is Test Anxiety, which consists of 15 items that reflect the anxiety associated with university exams. Finally, the AMAS-C has a Lying subscale that consists of 7 items. As in the case of the AMAS-A,

the TOT score of the AMAS-C is the sum of the scores of all the subscales without including the lying subscale.

Coping Strategies Scale - Modified (EEC-M) made up of 69 items, has 12 factors which are distributed: Factor 1 problem solving, Factor 2 social support, Factor 3 waiting, Factor 4 religion, Factor 5 emotional avoidance , Factor 6 professional support, Factor 7 aggressive reaction, Factor 8 cognitive avoidance, Factor 9 positive reappraisal, Factor 10 expression of coping difficulty, Factor 11 denial and Factor 12 called autonomy, aims to identify, measure and distinguish the frequency of use of coping strategies that people assume at an individual level in the face of stressful situations that they face in life.

3 RESULTS

The analysis of results was carried out using Excel matrices, which allowed the tabulation of the information obtained from the applied instruments.

According to the results obtained, the most important sociodemographic conditions of the population corresponding to sex and age are established, where males represent 13.6% of the total sample and females represent 84.8% of the population. on the other hand, the ages range between 17-25 years.

Initially, an analysis of the results obtained through the application of the AMAS C test was carried out, from which all those related to the areas of anxiety before exams, physiological anxiety and total anxiety of students from II to X semester were taken, taking into account counts the categories (extreme, clinically significant, mild, expected and low), the averages obtained in each area per semester and the T scores that allowed us to make the proper classification taking into account the test manual (Table 1).

Table. 1 Average AMA-C Results

AVERAGE RESULTS OF THE AMAS						
	PHYSIOLOGICAL ANXIETY		EXAM ANXIETY		TOTAL ANXIETY	
	AVERAGE	T-SCORE	AVERAGE	T-SCORE	AVERAGE	T-SCORE
II	4.1	72	9	71	25.2	76
III	4.8	fifty	8.7	71	23.3	69
IV	2.7	49	7.8	63	21.3	60
v	2.5	47	6.18	53	18.25	49
SAW	4.33	72	9	71	24.73	76
VII	2	47	6,83	60	15,33	38
VIII	3.35	60	7,2	60	24,4	72
9	1.37	47	6,37	53	17,62	46
X	2,3	47	6,15	53	21,2	60

Source: Proper

Finding that for the Physiological Anxiety area, taking into account the T scores, t= 45 and 54, 67% of the semesters evaluated are within the category of Expected Anxiety, 11% in the mild category t=55 and 64, and the 22% in clinically significant t=65 and 74. In Anxiety before exams, the results obtained show that 33% of the semesters that were evaluated present a clinically significant level of anxiety t= 65 and 74; another 33% showed a level of mild anxiety t= 55 and 65; and lastly, 33% had an expected level of anxiety t=45 and 54. Regarding Total Anxiety, it is possible to show that 22% of the semesters were placed in the category of Extreme Anxiety t=>75; another 22% in the level of clinically significant anxiety t=65 and 74, 22% in mild total anxiety t=55 and 64; another 22% within expected total anxiety t=45 and 54, and only 11% low total anxiety t=<44. (Table 1).

Finally, when finally making the comparison between the results obtained from the 3 areas of Anxiety (Physiological, before exams and Total) it is possible to observe that semesters II and VI are the groups with the highest T scores, thus evidencing manifestations of anxiety significantly compared to the other semesters included in the research. (Table 1)

The analysis of the most used coping strategies in psychology students from II to X semester was continued through the application of the Modified Coping Strategies Scale (EEC-M), in which, through the percentiles found, it is observed that the area with the greatest significance is that related to the expression of coping difficulty (EDA) with percentiles between 20-35, which occurs in all semesters, in the same way it is possible to show significant scores as they are for the search area of support (BAS) with some percentiles of 35 in and in the positive reappraisal area with percentiles of 35, respectively. (Table 2)

Table 2. Results of the EEC-M.

	BAS		PR		EDA	
	AVERAGE	PERCENTILE	AVERAGE	PERCENTILE	AVERAGE	PERCENTILE
II	21.11	40	20.55	60	10.94	25
III	23.5	55	16.33	35	12.16	30
IV	22.67	fifty	15.72	35	10.33	twenty
v	24.32	55	17.31	40	11.93	30
6	21,12	40	16,37	35	12,56	35
VII	20,8	35	20.5	60	12,16	30
VIII	21,2105	40	17,421	40	10.4736	20
9	22,4	50	17,8	40	10,8	20
X	23.05	50	18,85	50	10.75	twenty

Own source

Thirdly, regarding the relationship between test anxiety and the coping styles used in psychology students from II to X semesters, we have that, at a general level, regardless of the degree of total anxiety they may present, they all use as a strategy the expression of the difficulty of coping. When performing an individualized interpretation, we found that the II, III and VI semesters present clinically significant test anxiety with high use of the coping style Expression of coping difficulty and with high average use of Positive Reappraisal. What corresponds to semesters IV, VII and VIII present an anxiety before exams of a mild type with high use of the coping style Expression of coping difficulty, and with medium use Search

for support and Positive reappraisal. Finally, what concerns the semesters V, IX and X present anxiety before the exams of the expected type, making use of the coping style Expression of Coping Difficulty at a high level. (Table 3)

Table 3. Relationship between test anxiety and coping styles.

	EXAM ANXIETY	COPING STYLES
II	clinically significant	Expression of Coping Difficulty
III	clinically significant	Expression of Coping Difficulty positive reappraisal
IV	Mild	Expression of Coping Difficulty positive reappraisal
v	expected	Expression of Coping Difficulty
SAW	clinically significant	Expression of Coping Difficulty positive reappraisal
7th	Mild	Expression of Coping Difficulty search for support
viii	Mild	Expression of Coping Difficulty
IX	expected	Expression of Coping Difficulty
X	expected	Expression of Coping Difficulty

Own source

4 DISCUSSION

The results of this research show the levels of anxiety before exams reported by psychology students from II to X semester, and what are the coping strategies most used to deal with these situations and the relationship between the two variables and contrast the results obtained by other referents.

Regarding the first objective, the results show us that psychology students from the 2nd to the 10th semester present 67% of expected physiological anxiety, therefore their physiological conditions are common; 22% manifest clinically significant physiological anxiety, which suggests tense, nervous individuals; predisposed to psychosomatic illnesses and attention problems and finally 11% a physiological anxiety tense individuals, somewhat restless and that probably function well in the absence of other elevations according to the potential meaning of the score that appears stipulated in the AMAS manual. The previous results show a relationship with that described by Navas (1991) who defines "anxiety as an

emotional state, therefore there is a mixture of feelings, behaviors and reactions or physiological sensations" (as cited in Diaz & Castro, 2020, p.13), and according to (Miguel, T. 1990) by "Physiological aspects characterized by a high degree of activation of the autonomic nervous system and motor aspects that usually involve poorly adjusted and poorly adaptive behaviors" (as cited in Diaz & Castro, 2020, p.13).

Regarding test anxiety, the values obtained between the groups were uniformly distributed, 33% clinically significant anxiety related to evaluations or assessments of any kind and possibly detrimental to performance; repetitive worry about general grades and a test; 33% mild relief related to exams that probably motivates them and rarely impairs performance and finally 33% expected anxiety with normal levels of worry related to solving exams; No unusual responses are anticipated as long as there is adequate preparation, according to the potential meaning of the score that appears stipulated in the AMAS manual. According to these results, it is important to highlight what was stated by Conde (2004) who states that "students feel threatened when they are evaluated, so they may suffer from harmful anxiety." "The anxiety before the exams produces in some students can produce a series of negative emotional reactions that can inhibit the execution of the students according to their academic potential" (Onyeizogbo, 2010).

Likewise, (Ricoy and Fernández, 2013). maintains that "Students attribute a series of conflicting sensations at the time of being evaluated, although negative emotions (mainly nervousness) prevail over positive ones, before and during the development of the exams, in the same way, to account for the academic performance at the students generate an increase in anxiety, when the instructions offered by teachers are threatening to carry out a test and if there is pressure with the time available or if the task is complex

When comparing the previous results with those obtained in Total Anxiety, we find in the latter a homogeneous distribution of data, thus being 22% of Extreme Total Anxiety, which refers to a probable alteration of thought and weakening of emotional energy, vague fears, deficiency in decision making and frequent evidence of poor judgment; probable concomitant depression; 22% clinically significant total anxiety therefore fearful, anxious individuals are found and with probability of some psychophysiological manifestations of anxiety and possible rigidity in the thought process; 22% slight total anxiety students adapted to their environments, who try to be well despite certain insecurities; 22% expected total anxiety, typical students without abnormal patterns of stress or unusual reactions and finally 11% low total anxiety in those confident and focused students or associated with narcissistic tendencies; according to the potential meaning of the score that appears stipulated in the AMAS manual.

Taking into account the results, several authors and investigations affirm that university students constitute a risk group for anxiety due to their psychological, social, academic demands and high stress, although it is true, there is a level of anxiety that is considered mild and clinically significant, when the established indices considered mild are exceeded, a deterioration in daily activities appears, causing a lower performance in their performance. According to the 2017 National Mental Health Survey in Colombia, there are multiple situations that increase the risk of mental health disorders, with anxiety being one of the most frequent in Colombia in adults aged 18 to 44, 9.6%. (95% CI: 8.8%-10.5%) have symptoms suggestive

of a mental disorder, 52.9% have one or more anxiety symptoms and 80.2% show 1 to 3 depressive symptoms.

Regarding the results obtained on coping strategies, it is found that students tend to use more frequently the one related to the expression of coping difficulty (EDA) with percentiles between 20-35, which occurs in all semesters. , support seeking (BS) with a percentile of 35 in the seventh semester and in the area of positive reappraisal with percentiles of 35 in the semesters of III, IV and VI, respectively in this way. The results obtained are consistent with the study carried out by Cárdenas, Camargo & Castillo (2011) on the relationship between anxiety levels and coping strategies in psychology practitioners from a Colombian university, they are supported by the findings of the present investigation, being the problem solving strategies and search for social support the most used by students; Similarly, the study conducted by Moreno & Villegas (2008) found that problem solving and autonomy yielded scores above 63% and 56% respectively, while seeking support with 59%, cognitive avoidance 56%. and expression of coping difficulty 56%.

The expression strategy of coping difficulty, positive reappraisal and the search for support are aimed at minimizing the effects of the stressor by addressing it directly, being strategies of nature, cognitive strategies and behavioral strategies, where the expression of coping difficulty seeks know about the problem and clarify the alternatives to face the problem, the positive reappraisal seeks or is a cognitive strategy directed towards optimism to the contribution of tolerating the problem and generating thoughts that favor the problem and/or situation, and the search for support aimed at finding the professional resource for the solution of the problem, all these strategies generate efforts for the possible different types of solutions.

Regarding the relationship established between anxiety and coping styles, we found that all semesters, regardless of the level of anxiety they present before the exams, have the Expression of Coping Difficulty as their main coping style, this being a coping strategy. cognitive character where the individual seeks to know about the problem and thus clarify the various alternatives to face it, in the same way, here the individual expresses the emotions generated by the situation and/or problem. This strategy emerges as an expression of hopelessness or frustration in controlling the problem, this implies a self-assessment process, where the individual will look for other strategies on the way to help himself, such as Social or Professional Support, where he will identify the difficulties and possible solutions to the problem through non-own resources, according to the results obtained, it cannot be concluded that all semesters use this type of coping style, but it is possible to add the three most used according to the result of the applied instruments, taking into account consideration the Expression of Coping Difficulty, Positive Reassessment and the Search for Support, being the most significantly used.

5 CONCLUSION

In relation to what was previously stated in this investigation, the specific objectives set and the general objective were achieved. In the first place, the levels of anxiety present in the students from II to X semester of psychology were evaluated, taking into account the results obtained in the categories of Physiological Anxiety, Exam Anxiety and Total Anxiety, it can be highlighted that unlike the other semesters that were between the mild and expected range in both types of anxiety, II and VI showed Extreme and Clinically significant values, an aspect of marked relevance that requires further exploration, because these variations may be due to a multiplicity of factors. factors among which can be found what concerns the semester in which they are, the responsibilities that are assumed, the adaptation to the new change such as entering university life in the case of the II semester and for VI the concerns about find yourself in a semester about to start your professional practices and that demands much more responsibility, however we cannot It is concluded as such that these are the reasons for these variations between the semesters and it is necessary to continue monitoring the students in order to determine the causes or reasons that lead them to experience more anxiety in relation to the upper and lower semesters, respectively. With regard to some students, they drew attention to the scores that their tests showed, values that exceed normal traits and that make them prone to developing some type of disorder.

Secondly, the coping strategies that students use most frequently were identified and it was possible to conclude that in relation to this variable, most semesters mainly use the Expression of Coping Difficulty as Coping Style, except VII semester that uses Support Seeking, this shows the preference for the use of coping aimed at expressing the emotions generated by the situation, and solving problems, indicating that the majority of students tend to accept that situations exceed them and they must make an open expression of their emotions in order to subsequently be able to find a solution to problems by relying on others, this coping style can be described as the precursor of other coping styles.

Thirdly, the general objective was fulfilled, to establish if there was a relationship between Anxiety before exams and Coping Styles from II to X semester of psychology, concluding that regardless of the level of total Anxiety before exams that manifest the students, the coping style that occurs most is the Expression of Coping Difficulty, thus evidencing that there is a relationship between both variables, however, these results suggest the need for other research where the same is done with other professional careers and that a comparison be made and be able to conclude if the professional career has something to do with the Coping Style to be used by the students, or if not, it must be for other reasons.

The styles that most predominated in the study sample were: the "active" coping style, followed by the "turn to religion" coping style and, slightly below, "search for social support (instrumental reasons)". The least used styles were: "search for social support (emotional reasons)" and "acceptance".

Taking into account the results obtained from this investigation, some recommendations have been structured based on the results at a general level, making it necessary to continue the investigation and follow-up in relation to the semesters that presented higher levels of anxiety and coping styles.

Due to the individual results obtained by some students, which were clinically significant for test anxiety, the implementation and application of programs from institutional well-being in aspects related to study habits, study techniques (schemes, summaries and diagrams), relaxation techniques and monitoring by psychology.

Conflict of interest and funding sources

It is declared that none of the authors presented any relevant conflict of interest in this article. Likewise, the research has been financed and sponsored by the Metropolitan University.

REFERENCES

- Ali Escobedo, RM, & Chambi Paredes, ON (2016). Anxiety before the exams in the First Year Students of the Professional School of Civil Engineering and the Professional School of Nursing of the Universidad Peruana Unión Filial Juliaca-2016.
https://repositorio.upeu.edu.pe/bitstream/handle/UPEU/639/Ruth_Tesis_bachiller_2016.pdf?sequence=1&isAllowed=y
- Alvarez, J., Aguilar, JM, & Lorenzo, JJ (2012). Test Anxiety in University Students: Relations with personal and academic variables. *Electronic Journal of Research in Educational Psychology*, 10(1), 333-354. <https://www.redalyc.org/articulo.oa?id=2931/293123551017>
- Aragón-Borja, LE, Contreras-Gutiérrez, O., & Tron-Álvarez, R. (2011). Anxiety and constructive thinking in university students. *Journal of behavior, health & social issues (Mexico)*, 3(1), 43-56. http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S200707802011000100005
- Ávila-Toscano, JH, Pacheco, SLH, González, DP, & Polo, AC (2011). Relationship between test anxiety, types of tests and academic performance in university students. *Psychopeople*, 14(26), 255-268. <https://www.redalyc.org/pdf/4975/497552359004.pdf>
- Berrios Kings, YDC (2017). Anxiety before exams and learning styles in secondary school students from a public educational institution in Ferreñafe.
<http://repository.uss.edu.pe/bitstream/handle/uss/4133/Berrios%20Kings%20.pdf?sequence=1&isAllowed=y>
- Bolsoni -Silva, AT, & Loureiro, SR (2014). Or the role of social skills and social anxiety em students university students *Paidéia (Ribeirão Preto)*, 24(58), 223-2
https://www.sky.br/sky.php?pid=S0103863X2014000200223&script=sci_abstract&tlng=en
- Caballero -Dominguez, CC, González Gutiérrez, O., & Palacio Sañudo, JE (2015). Relationship of burnout and engagement with depression, anxiety and academic performance in university students. *Uninorte Health Scientific Journal*, 31(1). <http://www.scielo.org.co/pdf/sun/v31n1/v31n1a08.pdf>
- Cardenas, MTC, Castillo, CAG, & Camargo, YS (2011). Relationship between anxiety levels and coping strategies in psychology practitioners from a Colombian university. *International Journal of Psychological Research*, 4(1), 50-57. <https://www.redalyc.org/pdf/2990/299022819007.pdf>
- Cardona-Arias, JA, Perez -Restrepo, D., Rivera-Ocampo, S., & Gómez-Martínez, J. (2015). Prevalence of anxiety in university students. *Diversitas*, 11(1), 79-89.
<https://www.redalyc.org/articulo.oa?id=67943296005>
- Cardona-Arias, JA, Perez -Restrepo, D., Rivera-Ocampo, S., & Gómez-Martínez, J. (2015). Prevalence of anxiety in university students. *Diversitas*, 11(1), 79-89.
<http://www.scielo.org.co/pdf/dpp/v11n1/v11n1a06.pdf>
- Casari, L.M., Anglada, J., & Daher, C. (2014). Coping strategies and test anxiety in university students. *Journal of Psychology (PUCP)*, 32(2), 243-269. <https://www.redalyc.org/articulo.oa?id=337832618003>
- Castillo Pimienta, C., Chacón de la Cruz, T., & Díaz-Véliz, G. (2016). Anxiety and sources of academic stress in health career students. *Medical Education Research*, 5(20), 230-237.
<https://www.redalyc.org/articulo.oa?id=349747925004>
- Celis, J., Bustamante, M., Cabrera, D., Cabrera, M., Alarcón, W., & Monge, E. (2001). Anxiety and academic stress in first and sixth year human medicine students. In *Annals of the Faculty of Medicine (Vol. 62, No. 1, pp. 25-30)*. National University of San Marcos.
<https://www.redalyc.org/pdf/379/37962105.pdf>

- Chaves, EDCL, Iunes , DH, Moura, CDC, Carvalho, LC, Silva, AM, & Carvalho, ECD (2015). Anxiety and spirituality in students university students : one cross- sectional study . *Brazilian Journal of Nursing* , 68(3), 504-509. https://www.scielo.br/scielo.php?script=sci_arttext&pid=S0034-71672015000300504
- Contreras, F., Espinosa, JC, Esguerra, G., Haikal , A., Polanía, A., & Rodríguez, A. (2005). Self-efficacy, anxiety and academic performance in adolescents. *Diversitas: Perspectives in Psychology*, 1(2), 183-194. <https://www.redalyc.org/pdf/679/67910207.pdf>
- Contreras-Gutiérrez, O., Chávez-Becerra, M., & Aragón-Borja, LE (2012). Constructive thinking and coping with stress in university students. *Journal of behavior , health & social issues (Mexico)*, 4(1), 39-53. http://www.scielo.org.mx/scielo.php?script=sci_arttext&pid=S2007-07802012000100003&lang=es .
- Crego , A., Carrillo-Diaz, M., Armfield , JM, & Romero, M. (2016). Stress and academic performance in dental students: the role of coping strategies and examination - related self - efficacy. *Journal of dental education*, 80(2), 165-172. <http://www.jdentaled.org/content/jde/80/2/165.full.pdf>
- Cunza Aranzabal, DF (2020). Psychometric properties of the Test Anxiety Scale and Assessment Situations (EAAESE) in secondary school students. <https://repositorio.upeu.edu.pe/handle/UPEU/3839>
- DeBravo, XB (2009). STUDENT ANXIETY BEFORE AN EXAM" EXPERIMENTAL RESEARCH WORK I. *Fides et Ratio-Journal of Cultural and Scientific Dissemination of La Salle University in Bolivia*, 3(3), 97-112. http://www.scielo.org.bo/scielo.php?script=sci_arttext&pid=S2071081X2009000100009&lng=es&tlng=en .
- del Toro Añel , AY, González Castellanos, MDL Á., Arce Gómez, DL, Reinoso Ortega, SM, & Reina Castellanos, LM (2014). Physiological mechanisms involved in pre-examination anxiety. *Medisan* , 18(10), 1419-1429. http://scielo.sld.cu/scielo.php?pid=S1029-30192014001000012&script=sci_arttext&tlng=en
- Derakshan , N., & Eysenck, MW (2009). Anxiety, processing efficiency, and cognitive performance: new developments from attentional control theory. *European Psychologist* , 14(2), 168. <://www.iapsych.com/articles/derakshan2009.pdf>
- Diaz Cordoba, LM, & Castro Franco, JV (2020). Influence of anxiety on the academic performance of university students. https://repository.ucc.edu.co/bitstream/20.500.12494/18306/3/2020_ansiedad_rendimiento_academico.pdf
- Diaz Martin, Y. (2010). Academic stress and coping in medical students. *Medical Humanities*, 10(1), 0-0. http://scielo.sld.cu/scielo.php?pid=S1727-81202010000100007&script=sci_arttext&tlng=en
- Diaz, CAG, Luna, A., Davila, A., & Salgado, MJ (2010). Coping strategies in people with anxiety. *Psychology : Advances in the Discipline*, 4(1), 63-70. <https://www.redalyc.org/pdf/2972/297224086006.pdf>
- Domarco , E. C. (2004). Anxiety in music education. *Journal of Psychodidactics* , (17), 0. <https://core.ac.uk/download/pdf/230749427.pdf>
- Dominguez Martinez, YE (2019). Coping and anxiety in high school students of a private educational institution, Comas-2018 (Partial thesis). <https://repositorio.upn.edu.pe/bitstream/handle/11537/15297/Dominguez%20Mart%EDnez%20Yesareth%20Estefany.pdf?sequence=3>
- Dominguez-Lara, S. (2016). Inventory of state test anxiety: preliminary analysis of validity and reliability in psychology students. *Liberabit* , 22(2), 219-228. http://www.scielo.org.pe/scielo.php?pid=S1729-48272016000200009&script=sci_arttext&tlng=en

- Dominguez-Lara, S. (2018). Convergent and Discriminating Evidence of TAI-State: Influence of Pre-Test Coping Strategies . *Digital Journal of Research in University Teaching*, 12(2), 237-255.
http://www.scielo.org.pe/scielo.php?pid=S2223-25162018000200012&script=sci_arttext&tlng=pt
- Domínguez-Lara, SA, Bonifacio-Vilela, M., & Caro-Salazar, A. (2016). Prevalence of test anxiety in a sample of university students from Metropolitan Lima. *Journal of Psychology*, 6(2), 45-56.
<http://revistas.ucsp.edu.pe/index.php/psicologia/article/view/155/150>
- Eduardo Piemontesi , S., Esteban Heredia, D., Alberto Furlan , L., Sanchez -Rosas, J., & Martinez , M. (2012). Test anxiety and coping styles with academic stress in university students. *Annals of Psychology* , 28(1), 89-96.
https://www.researchgate.net/publication/286580126_Test_anxiety_and_coping_styles_with_academic_stress_in_university_students
- Espinoza Ortíz , AA, Guamán Arias, MP, & Sigüenza Campoverde, WG (2018). Coping styles in adolescents from schools in the city of Cuenca, Ecuador. *Cuban Journal of Higher Education* , 37 (2), 45-62. http://scielo.sld.cu/scielo.php?script=sci_arttext&pid=S0257-43142018000200004
- Eysenck, MW, Derakshan , N., Santos, R., & Calvo, MG (2007). Anxiety and cognitive performance: attentional control theory. *Emotion*, 7(2), 336.
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.453.3592&rep=rep1&type=pdf>
- Feldman, L., Goncalves, L., Puignau , GCC, Zaragoza, J., Bagés , N., & De Paulo, J. (2008). Relations between academic stress, social support, mental health and academic performance in Venezuelan university students. *university psychology* , 7(3), 739-752.
<http://www.scielo.org.co/pdf/rups/v7n3/v7n3a11.pdf/>
- Fernandez, J., & Rusiñol, J. (2003). Economics and psychology: costs for poor academic performance related to anxiety about exams and assessment tests. Retrieved on, 26.
<https://www.uoc.edu/dt/20128/20128.pdf>
- Fernandez-Castillo, A. (2009). Anxiety during academic evaluation tests: influence of the amount of sleep and aggressiveness. *Mental Health* , 32(6), 479-486. <https://www.medigraphic.com/pdfs/salmen/sam-2009/sam096e.pdf>
- Ferry, D.B. (2015). Anxiety and academic stress in students from public vs. private universities (Doctoral dissertation , Universidad Argentina de la Empresa).
<https://repositorio.uade.edu.ar/xmlui/bitstream/handle/123456789/5453/Ferri%20Daniela.pdf?sequence=1&isAllowed=y>
- Furlan , L.A. (2013). Efficacy of an Intervention to Reduce Test Anxiety in Argentine University Students. *Colombian Journal of Psychology*, 22(1), 75-89.
<https://www.redalyc.org/articulo.oa?id=80428081006>.
- Furlan , L.A., Rosas, J.S., Heredia, D., Piemontesi , S., & Illbele , A. (2009). Learning strategies and test anxiety in university students. *Psychological Thought*, 5(12).
<https://www.redalyc.org/articulo.oa?id=80111899009>
- Furlan, L., Piemontesi , S., Heredia, D., & Rosas, JS (2015). Test Anxiety in College Students: Correlates and Treatment. *Research Yearbook of the Faculty of Psychology*, 2(1), 37-53.
<https://revistas.unc.edu.ar/index.php/aifp/article/view/12629/12899>
- Gaviria, A., Correa, L., Davila , C., Burgos, G., Osorio, E., & Valderrama, J. (2017). NATIONAL MENTAL HEALTH OBSERVATORY. Methodological Guide for the National Mental Health Observatory. <https://www.minsalud.gov.co/sites/rid/Lists/BibliotecaDigital/RIDE/VS/ED/GCFI/guia-ross-salud-mental.pdf> .

- Gomes, VM, Silva, MJPD, & Araújo, EAC (2008). Effects therapeutic touch graders at reducing student anxiety __ university students . Brazilian Journal of Nursing , 61(6), 841-846.
<https://www.scielo.br/pdf/reben/v61n6/a08v61n6.pdf> .
- Grandis , AM (2009). Evaluation of anxiety in front of university exams (Doctoral dissertation).
http://lildbi.fcm.unc.edu.ar/lildbi/tesis/grandis_amanda_mercedes.pdf
- Labrador, Y. (2014). *Test anxiety and academic self-efficacy in university students: correlations, age and gender differences* (Doctoral dissertation , Universidad Argentina de la Empresa).
<https://repositorio.uade.edu.ar/xmlui/bitstream/handle/123456789/2440/Labrador.pdf?sequence=1&isAllowed=y>
- Lancha Vicente, C., & Carrasco Ortiz, M.A. (2003). Intervention in test anxiety, obsessions and compulsions contained in an obsessive-compulsive personality disorder. <http://e-spacio.uned.es/fez/eserv/bibliuned:AccionPsicologica2003-numero2-0006/Documento.pdf> _
- Law 1090 of 2006. By which the exercise of the profession of Psychology is regulated, the Deontological and Bioethical Code and other provisions are issued. September 6, 2006. DO No. 46,383.
- López Peña, GV, & Vélez Barragán, JC (2018). Coping strategies of the students of the cooperative university of Colombia, Villavicencio campus.
https://repository.ucc.edu.co/bitstream/20.500.12494/5440/1/2018_estrategias_afrentamiento_estudiantes.pdf
- Lozano Ramírez, JC, & López Restrepo, JJ (2016). Anxiety levels and coping strategies of a group of university students in Valle de Aburrá (Doctoral dissertation , Psychology).
https://repository.uniminuto.edu/bitstream/handle/10656/5164/TP_LopezRestrepoJannyJohana_2016.pdf?sequence=3 .
- Maldonado Mendoza, CI, & Zenteno Gaytán, MB (2018). Academic procrastination and test anxiety in students from private universities in East Lima.
https://repositorio.upeu.edu.pe/bitstream/handle/20.500.12840/1040/Marlith_Tesis_Bachiller_2018.pdf?sequence=5&isAllowed=y
- Matalinares , ML, Díaz, G., Raymundo, O., Baca, D., Uceda, J., & Yaringaño , J. (2016). Coping with stress and psychological well-being in university students from Lima and Huancayo. Person, (019), 105-126. <https://revistas.ulima.edu.pe/index.php/Persona/article/view/975/936>
- Melgosa, J. (2019). Positive mind: how to achieve emotional health and well-being. South American Publishing House Association
- Onyeizugbo , US (2017). Self-efficacy , gender, and trait anxiety as moderators of test anxiety. Electronic Journal of Research in Educational Psychology, 8(20), 299-312.
<http://www.investigacionpsicopedagogica.org/revista/new/ContadorArticulo.php?375> .
- Páez Cala, ML, & Castaño Castrillón, JJ (2015). Emotional intelligence and academic performance in undergraduate students. Psychology from the Caribbean, 32(2), 268-285.
<http://www.scielo.org.co/pdf/psdc/v32n2/v32n2a06.pdf>
- Piemontesi , SE, Heredia, DE, Furlan , LA, Rosas, JS, & Martínez, M. (2012). Exam anxiety and coping styles in the face of academic stress in university students. Annals of Psychology/ Annals of Psychology , 28(1), 89-96. <https://www.redalyc.org/pdf/167/16723161011.pdf>
- Piergiovanni , L.F., & Depaula , P.D. (2018). Self-efficacy and styles of coping with stress in university students. Psychological Sciences, 12(1), 17-23.
http://www.scielo.edu.uy/scielo.php?script=sci_arttext&pid=S1688-42212018000100017&lang=es .
- Policy, C. (1991). Congress of the republic. Republic of Colombia.
<http://spij.minjus.gob.pe/Normas/textos/151103T.pdf>

- Reynolds, C., Richmond, B., & Lowe, P. (2007). AMAS: Overt Anxiety Scale in Adults. Mexico: The Modern Manual. <https://pseaconultores.com/wp-content/uploads/2020/10/AMAS.-Escala-de-ansiedad-manifiesta-en-adultos.pdf>
- Ricoy , M.C., & Fernández-Rodríguez, J. (2013). The perception that university students have about evaluation: a case study. *Education xx1* , 16 (2), 321-341. <https://www.redalyc.org/pdf/706/70626451006.pdf>
- Rhodes Cross , AM , Guzman Ponce , BA , & Salinas Cross , DG (2008). Anxiety before exams and its influence on academic performance among Baccalaureate students of Joseph Engineers College in Merliot City. <http://biblioweb.ufg.edu.sv/virtual/index.cgi?record=10567&typology=1&view=C&search=EDUCATION>
- Salgado , A. , Rosario , P. , Nunez Perez , JC , Gonzalez- Pienda , JA , Valley , A. , Joly , C. , & Bernardo , A. (2008). Anxiety before exams: relationship with personal and family variables. *Psychothema* , 20, 563–570. <https://www.redalyc.org/pdf/727/72720409.pdf>
- Health, MDE (1993). MINISTRY OF HEALTH RESOLUTION NUMBER 8430 OF 1993. 1993, 1-19.
- Serrano Pintado, I., Delgado Sánchez-Mateos, J., & Escolar-Llamazares, MC (2016). A stress inoculation program to cope with test anxiety: differential efficacy as a function of worry or emotionality. *Advances in Latin American Psychology*, 34(1), 3-18. http://www.scielo.org.co/scielo.php?script=sci_arttext&pid=S1794-47242016000100002
- Solis, C., & Vidal, A. (2006). Coping styles and strategies in adolescents. *Journal of psychiatry and mental health Hermilio Valdizan* , 7(1), 33-39. https://www.mdp.edu.ar/cssalud/deptoterapia/archivos/Psicologia_General_SEMINARIO/ESTILOS_Y ESTRATEGIAS_DE_AFRONTAMIENTO_en_adolescencia.pdf
- Taborda, L., Burgos, C., Tellez, J., & Vasquez, R. (1985). Principles of psychiatric semiology. Department of Psychiatry, Faculty of Medicine, Colegio Mayor de Nuestra Señora del Rosario, Hospital San José Bogotá, Colombia.
- Tirado, JLA, Ortega, SL, Diaz, VAH, & Martin, FDF (2005). Brief therapy in university students with academic performance problems and anxiety: efficacy of the "la cartuja" model. *International Journal of Clinical and Health Psychology*, 5(3), 589-608. <https://www.redalyc.org/articulo.oa?id=33705310>
- Torrano-Martínez, R., Ortigosa-Quiles, JM, Riquelme-Marín, A., & López-Pina, JA (2017). Assessment of test anxiety in Compulsory Secondary Education students. *Journal of Clinical Psychology with Children and Adolescents* , 4 (2), 103-110. <https://www.redalyc.org/pdf/4771/477152556002.pdf>
- Trujillo Alfonso, L.V., & Navarro Olivera, L.G. (2020). Coping strategies in psychology students at the Universidad Cooperativa de Colombia, Villavicencio. https://repository.ucc.edu.co/bitstream/20.500.12494/18238/1/2020_estrategias_afrontamiento_psicologia.pdf
- Valencia, PD, Paz, JR, Paredes, E., León, M., Zuñe, C., Falcón, C., ... & Murillo, L. (2017). Experiential avoidance, coping and anxiety in students of a public university in Metropolitan Lima. *Interactions: Journal of Advances in Psychology*, 3(1), 45-58. <https://dialnet.unirioja.es/servlet/articulo?codigo=5961159>
- Velez, DMA, Garzon, CPC, & Ortiz , DLS (2008). Characteristics of anxiety and depression in university students. *International journal of psychological research*, 1(1), 34-39. <https://www.redalyc.org/articulo.oa?id=64712168008&idp=1&cid=1412626> .