University students' coping strategies in the face of psychological distress

Estrategias de afrontamiento de los estudiantes universitarios ante el malestar psicológico

Gabrieli Mariano
Sirlei Dallagnol
Degree in Psychology. FAG University Center. Brazil

Claudia Barbosa
PhD in Psychology. Unioeste. Brazil

Rafael Corrêa
PhD in Public Health and Health Education. Getúlio Vargas Foundation. – FGV. Brasil

Abstract

Introduction: Psychological distress is characterized by a set of signs and symptoms, as well as any kind of negative reaction to stressful events caused by everyday life. In the face of psychological distress, people often develop coping strategies. Objective: To identify the coping strategies used by university students in the face of psychological distress. Methodology: Quantitative, cross-sectional and descriptive study carried out using a stratified proportional and simple random sample of 276 students enrolled from the 1st to the 8th period of the medicine course. Results: Most of the students presented psychological distress, 58.70%. The most frequently used coping strategies were avoidance (10.48±5.09), self-control (10.20±3.78), positive reappraisal (9.76±4.16) and problem solving (9.58±4.12). Students with psychological distress used the coping strategies of avoidance-avoidance (12.23±4.72, p=0.000) and acceptance and responsibility (6.81±3.07, p=0.010), while those without psychological distress showed greater problem-solving (10.45±4.02, p=0.003) as a coping strategy. Conclusion: Students who experience psychological distress develop coping strategies. Research and interventions aimed at developing coping strategies in the face of psychological distress are suggested.

Keywords

University students; Psychological distress; Coping strategies.

Resumen

Introducción: El malestar psicológico se caracteriza por un conjunto de signos y síntomas, así como por cualquier tipo de reacción negativa ante acontecimientos estresantes provocados por la vida cotidiana. Ante el malestar psicológico, las personas suelen desarrollar estrategias de afrontamiento. Objetivo: Identificar las estrategias de afrontamiento utilizadas por estudiantes universitarios ante el malestar psicológico. Metodología: Estudio cuantitativo, transversal y descriptivo realizado a partir de una muestra aleatoria estratificada proporcional y simple de 276 estudiantes matriculados del 1º al 8º período del curso de medicina. Resultados: La mayoría de los estudiantes presentó malestar psicológico, 58,70%. Las estrategias de afrontamiento más utilizadas fueron la evitación (10,48±5,09), el autocontrol (10,20±3,78), la revalorización positiva (9,76±4,16) y la resolución de problemas (9,58±4,12). Los estudiantes con malestar psicológico utilizaron las estrategias de afrontamiento de evitación-evitación (12,23±4,72; p=0,000) y aceptación y responsabilidad (6,81±3,07; p=0,010), mientras que aquellos sin malestar psicológico mostraron una mayor resolución de problemas (10,45±4,02; p=0,003) como estrategia de afrontamiento. Conclusiones: Los estudiantes que experimentan malestar psicológico desarrollan estrategias de afrontamiento. Se sugieren investigaciones e intervenciones dirigidas a desarrollar estrategias de afrontamiento ante el malestar psicológico.

Palabras clave

Estudiantes universitários; Malestar psicológico; Estrategias de afrontamiento.

Introduction

Psychological distress is characterized by a set of signs and symptoms, such as anxiety, neurasthenia, depression, suicidal ideation, as well as any kind of negative reaction to stressful events caused by everyday life. In addition, people who suffer from psychological distress can show vital exhaustion, with symptoms of irritability and demoralization (Lima et al., 2016).

Among university students, between 15% and 25% develop psychological distress, with a higher percentage among medical students. This high prevalence is due to various factors, the most common being individual or external demands, such as from the family, the institution (due to the exhausting workload), as well as social demands on the new health professional who must face stressful situations rationally (Lima et al., 2016).

Faced with conditions of psychological distress, people often develop coping strategies which can have both a positive and negative impact on the decisions to be made in adverse situations, influencing physical, mental, and emotional health (Dias & Pais-Ribeiro, 2019).

Going to university is generally a desired and planned situation with many expectations, both on the part of the student and their close family members. The whole process of preparation, the first contacts with the institution and with future colleagues, brings out the beliefs that will accompany the student throughout their academic life. However, it is important to be prepared for the adversities that will arise during the course, such as the study load and the personal and interpersonal demands that

can contribute to the development of psychological distress (Azevedo, 2019).

One of the aspects that can be related to the psychological suffering of university students is their life history together with the structure of higher education, including the socio-historical conditions in which the individual is constituted (Xavier et al., 2008). In addition to the stressful conflicts during academic life, in this phase of youth there are various transformations and changes relating to the biological, psychological, and social aspects that are part of the reality of this age group (Bastos et al., 2019).

In addition, there are complex changes at this stage when the individual enters university, which can be considered a period of great vulnerability, presenting various biopsychosocial transformations (Papalia & Feldman, 2013). When university students enter higher education, they meet and experience new conflicts in a social space that is considered different, a new universe full of rules, methodologies and unknown people who have other cultural and social values. Consequently, it is often necessary to form new habits, and, as a result, their identity is transformed, a process of abundant idealizations, anxieties and conflicts (Bastos et al., 2019).

What's more, this phase of a university student's life is not just a brief transition, as important changes are taking place and life decisions are being made. For most young people, it is therefore considered a time to satisfactorily form problem-solving strategies. However, it can represent a period of coping failures, lea-

ding to not only physical but also emotional symptoms (Bastos et al., 2019).

It is important to evaluate the transformations in terms of the human being who is faced with pain and suffering that can arouse feelings and intrusive thoughts of impotence and incapacity, thoughts that can be recurrent and violent, causing emotional discomfort and psychological suffering (Pereira, 2014).

In the same context, studies show that university students can reflect stressors from everyday life in their student life, which can trigger a series of mental health imbalances. This leads to physical exhaustion and, above all, emotional exhaustion, thus affecting quality of life, academic performance, social, physical, and psychological relationships (Vieira et al., 2021).

During their time at university, the authors highlight some of the prevalent factors for emotional distress, such as difficulty adapting to a new routine, living away from family, crisis in interpersonal relationships, excessive workload, financial difficulties, insecurity, lack of time and the inability to reconcile personal and social life, work, and study. It is worth noting that mental suffering can set in if university students are unable to cope with stressful events and do not use coping strategies to minimize or resolve the events (Vieira et al., 2021).

The study therefore highlights the importance of identifying which coping strategies university students use in the face of psychological distress. The same authors state that only intentional and conscious attempts can be considered coping strategies, given that every coping process aims to improve quality of life

by adjusting and reducing stress, psychological, physical, and emotional pressure, which trigger psychological suffering (Morero et al., 2018).

Coping strategies can be classified into two categories: the first focuses on the problem, while the second targets emotions. It is possible that the two are related, since one seeks to identify the problem and get rid of it, while the other seeks to reduce the anxiety caused by the stressor. This poorly established relationship can expose the subject to substance abuse, psychopathological conditions and recurrence of suicidal thoughts and ideation, thus increasing risk situations and psychological vulnerabilities (Morero et al., 2018).

Therefore, it is understood that identifying psychological distress and the coping strategies used by university students in the academic sphere is important, since the use of this information can contribute to future interventions in this context, helping to minimize the effects of stressors and prevent worsening.

Methods

The research is characterized as a quantitative, cross-sectional and descriptive study. The study followed ethical procedures with human beings (CAAE 54266021.6.0000.5219) and the Strengthening the Reporting of Observational Studies in Epidemiology - STROBE protocol.

The total number of students enrolled in the medical course in 2022 was 1284. Thus, to make the sample economically viable, stratified and proportional sampling was used with students from the 1st to the 8th period of the

medicine course (n=920), and the final sample consisted of 276 participants.

Based on the list of the number of students per term previously provided by the Medicine Course coordinators, contact was made with the participants for data collection by means of a rapport Data was collected using two questionnaires. The first was the Self Reporting Questionnaire (SRQ-20). According to (Santos et al., 2011), the instrument was developed by the World Health Organization (WHO) with the aim of assessing mental disorders in developed countries (WHO, 1994).

The SRQ-20 was validated in Brazil by Mari & Williams (Mari & Williams, 1986). The scale is made up of 20 dichotomous questions with yes or no answers, with the aim of identifying symptoms of mental health risk and acting as a screening, i.e. measuring whether or not psychiatric morbidity is present (Lima & Brito, 2018). Of the 20 questions, 4 assess physical symptoms and 16 psycho-emotional alterations; in addition, scores ≥ 7 (greater than or equal to seven) indicate psychological distress. The instrument has a Cronbach's alpha of 0.80 (Santos et al., 2011).

The other instrument, called the Inventory of Coping Strategies (IEC) (Folkman & Lazarus, 1988), was adapted and validated in Brazil by Savóia (Savóia et al., 1996). The IEC is an inventory made up of 66 items covering actions and thoughts that individuals use to cope with the demands of a specific stressful event. Each item in the inventory has four response options from zero to three, on a 4-point Likert scale: 0-"I haven't used this strategy"; 1-"I've used it a little"; 2-"I've used it a lot"; and 3-"I've

used it a lot". The inventory is also divided into eight factors: confrontation (6,7,17,28,34,46), withdrawal (12,13,15,21,41,44), self-control (10,14,35,43,54,62,63), social support (8,18,22,31, 42,45), acceptance of responsibility (9,25,29,51), escape and avoidance (11,16,33,40,47,50,58,59), problem solving (1,26,39,48,49,52) and positive reappraisal (20,23,30,36,38,56,60) (Savóia et al., 1996). The instrument has a Cronbach's alpha of 0.90 (Fetsch et al., 2016).

Once the data had been collected, a database was created using the Excel for Windows program, with independent typing, and the data was analyzed using descriptive statistics (frequency, percentage, mean and standard deviation) for the general population as a whole and by gender. The data was exported for analysis using the Statistical Package for the Social Sciences (SPSS) version 27.0. The t-test was used to analyze the relationship between the variables, with p<0.05 considered.

Results and discussions

Table 1 shows the distribution of psychological distress by medical course cycle. It was found that 52.54% (n=145) were enrolled in the basic cycle (1- 4 periods); of these, 21.38% (59) were male and 31.16% (86) female. In the clinical cycle (5-8 periods), 47.46% (n=131) of participants were identified; of these, 10.51% (29) were male and 36.95% (102) female.

About psychological distress by cycle, 41.3% (114) of the participants did not experience psychological distress; of these, 23.91% (n=66) were from the basic cycle and 17.39%

(n=48) from the clinical cycle. However, 58.70% (n=162) of the participants showed psychological distress; of these, 28.63% (n=79) were from the basic cycle and 30.07% (n=83) from the clinical cycle. In both cycles with suffering, females had a higher percentage, with 20.66% (n=57) in the basic cycle and 24.27% (n=67) in the clinical cycle.

Table 2 shows the distribution of coping strategies used by medical students. It was found that all the participants used coping strategies. The coping strategy factors with the highest means were avoidance (10.48±5.09),

self-control (10.20±3.78), positive reappraisal (9.76±4.16) and problem solving (9.58±4.12).

Females showed greater coping strategies in the factors Withdrawal (7.40±3.62), Social support (9.48±4.52), Escape and avoidance (11.02±4.85) and Positive reappraisal (10.10±4.00).

Table 3 shows the relationship between psychological distress and the coping strategies used by medical students. Students who experience psychological distress use coping strategies such as avoidance (12.23±4.72, p= 0.000) and acceptance of responsibility (6.81±3.07, p= 0.010). However, students

Table 1

Distribution of psychological distress by medical course cycle, total and by Gender.

Variables	Total % (n)	Male % (n)	Female % (n)
Course period	100 (276)	31.88 (88)	68.11 (188)
Basic cycle (1-4 period)	52.54 (145)	21.38 (59)	31.16 (86)
Clinical cycle (5-8 period)	47.46 (131)	10.51 (29)	36.95 (102)
No psychological distress	41.3 (114)	17.98 (50)	23.02 (64)
Basic cycle (1-4 period)	23.91 (66)	13.40 (37)	10.50 (29)
Clinical cycle (5-8 period)	17.39 (48)	4.71 (13)	12.68 (35)
With psychological distress	58.70 (162)	13.77 (38)	44.93 (124)
Basic cycle (1-4 period)	28.63 (79)	7.97 (22)	20.66 (57)
Clinical cycle (5-8 period)	30.07 (83)	5.80 (16)	24.27 (67)

n= sample.

Table 2

Distribution of coping strategies used by medical students, total and by gender.

Variables	Total	Male	Female
	M±DP	M±DP	M±DP
Confrontation	6.56±3.00	6.28±2.90	6.69±3.05
Detachment	7.15±3.75	6.61±4.00	7.40±3.62
Self-control	10.20±3.78	9.88±3.80	10.35±3.77
Social support	8.93±4.54	7.77±4.39	9.48±4.52
Acceptance of responsibility	6.39±3.25	6.05±3.53	6.55±3.10
Escape-esque	10.48±5.09	9.33±5.43	11.02±4.85
Problem solving	9.58±4.12	9.68±4.12	9.53±4.13
Positive reappraisal	9.76±4.16	9.06±4.42	10.10 ±4.00

M- Mean, SD- Standard Deviation, IEC- Coping Strategies Inventory.

Table 3

Relationship between psychological distress and coping strategies used by medical students.

Coping strategies	No suffering		With suffering	
	M±DP	p	M±DP	p
Confrontation	6.45±3.15	0.597	6.64±2.91	0.602
Detachment	6.96±3.51	0.476	7.28±3.92	0.468
Self-control	10.07±3.85	0.642	10.29±3.74	0.644
Social support	8.89±4.37	0.903	8.96±4.67	0.902
Acceptance of responsibility	5.68±3.41	0.009	6.81±3.07	0.010
Escape-esque	7.98±4.55	0.000	12.23±4.72	0.000
Problem solving	10.45±4.02	0.003	8.97±4.10	0.003
Positive reappraisal	10.30±4.34	0.074	9.39±3.99	0.078

M= mean; SD=standard deviation.
$p < 0.05$

without psychological distress used the problem-solving coping strategy (10.45±4.02, p=0.003).

University students in the basic and clinical cycle of the medical course suffer from psychological distress. Psychological distress or common mental disorders include anxiety, stress, and depression; these are considered a public health problem in Brazil and worldwide (Murcho et al., 2016).

The highest prevalence of psychological distress in the clinical cycle of the medical course has been identified as the clinical cycle with a similar risk, as it deals with the practical part of the degree, putting the student face to face with the reality of the profession (Lima & Brito, 2018). During this period there are a sum of factors that influence academic performance and well-being, which contribute to psychological distress (Azevedo, 2019).

Women showed greater psychological distress in both cycles. This result may be related to the large number of activities carried out by women in society, as well as hormonal issues and mood swings (Lima & Brito, 2018).

Faced with the conditions of suffering presented in this study, the coping strategies of avoidance-avoidance stand out as being the most used by students with psychological suffering. The avoidance-avoidance attitude is the way that human beings seek to respond to situations that require solutions, even if this attitude does not have the response of modifying the action that causes them discomfort or suffering, by avoiding or even withdrawing when they perceive a difficult situation. Thus, avoidance is an emotion-driven strategy, which becomes negative as it prevents the individual from seeking help (Trindade & Vieira, 2013).

Another coping strategy identified in the study was the strategy of accepting responsibility, which was prevalent among students with psychological distress. Acceptance of responsibility occurs when the person is faced with a situation of incapacity and seeks help,

assumes their own limitations, does not run away, remains even if they do not know the solution now, in other words, they put into practice their ability to deal with a stressful situation (Trindade & Vieira, 2013).

Furthermore, it was found that students who did not suffer from psychological distress used the coping strategy of problem-solving. Problem-solving is characterized by the ability to organize oneself in a reasonable and appropriate way when faced with adverse situations (Cintra Damião et al., 2009). This coping strategy is the ability to reflect, help, seek help and relieve undesirable effects of stress; in addition, the authors mention that this strategy depends on various individual resources, such as beliefs, culture, skills, social and family support and material resources (Trindade & Vieira, 2013).

Final considerations

The study confirms that undergraduate medical students experience psychological distress and use the coping strategies of avoidance and acceptance of responsibility. However, university students who do not have this condition use the problem-solving strategy. Research and interventions aimed at developing coping strategies in the face of psychological distress are suggested.

References

Azevedo, L. R. (2019). *Vida Universitária e Saúde mental: um estudo junto a estudantes da UFRB*. Universidade Federal do Recôncavo da Bahia.

Bastos, E. M., Maia, A. M., Oliveira, C. de L. F., & Ferreira, S. do N. (2019). Sofrimento psíquico de universitários: uma revisão integrativa. *Brazilian Journal of Development*, *5*(10), 17681–17694. https://doi.org/10.34117/bjdv5n10-040

Cintra Damião, E. B., Rossato, L. M., de Oliveira Fabri, L. R., & Dias, V. C. (2009). Ways of coping inventory: A theoretical framework. *Revista Da Escola de Enfermagem USP*, *43*(SPECIALISSUE.2), 197–201. https://doi.org/10.1590/S0080-62342009000600009

Dias, E. N., & Pais-Ribeiro, J. L. (2019). O modelo de Coping de Folkman e Lazarus: aspectos históricos e conceiturias. *Revista Psicologia e Saúde*, *11*(2), 55–66. https://doi.org/http://dx.doi.org/10.20435/pssa.v11i2.642

Fetsch, C. F. de M., Portella, M. P., Kirchner, R. M., Gomes, J. S., Benett, E. R. R., & Stumm, E. M. F. (2016). Estratégias de coping entre familiares de pacientes oncológicos. *Revista Brasileira de Cancerologia*, *62*(1), 17–25. https://doi.org/10.32635/2176-9745.rbc.2016v62n1.175

Folkman, S., & Lazarus, R. S. (1988). Coping as a Mediator of Emotion. *Journal of Personality and Social Psychology*, *54*(3), 466–475. http://www.revistas.unifacs.br/index.php/sepa

Lima, R. L. de, Soares, M. E. C., Prado, S. N. do, & Albuquerque, G. S. C. de. (2016). Estresse do Estudante de Medicina e Rendimento Acadêmico. *Revista Brasileira de Educação Médica*, *40*(4), 678–684. https://doi.org/10.1590/1981-52712015v40n4e01532015

Lima, J. K. A., & Brito, A. P. A. de. (2018). Desgaste e sofrimento psíquico em estudantes de medicina: uma revisão sistemática. In *Seminario Estudantil de Produção Acadêmica*. UNIFACS. http://www.revistas.unifacs.br/index.php/sepa

Mari, J. D. J., & Williams, P. (1986). A Validity Study of a Psychiatric Screening Questionnaire (SRQ-20) in Primary Care in the city of Sao Paulo. *British Journal Od Psychiatry*, *148*, 23–26.

Morero, J. A. P., Bragagnollo, G. R., & Santos, M. T. S. (2018). Estratégias de enfrentamento: uma revisão sistemática sobre instrumentos de avaliação no contexto brasileiro. *Revista Cuidarte*, *9*(2), 2257–2268. https://doi.org/10.15649/cuidarte.v9i2.503

Murcho, N., Pacheco, E., & Jesus, S. N. de. (2016). Transtornos mentais comuns nos Cuidados de Saúde Primários: Um estudo de revisão. *Revista Portuguesa de Enfermagem de Saúde Mental*, *15*, 30–36. https://doi.org/10.19131/rpesm.0129

Papalia, D. E., & Feldman, D. R. (2013). *Desenvolvimento Humano*. Porto Alegre. Artmed.

Pereira, M. A. D. (2014). O sofrimento psíquico na formação médica: percepções e enfrentamento do estresse por acadêmicos do curso de Medicina. In *Universidade Federal de Goiás*. Universidade Federal de Goias.

Santos, K. O. B., Araújo, T. M. de, Pinho, P. de S., & Silva, A. C. C. (2011). Avaliação de um instrumento de mensuração de morbidade psíquica: estudo de validação do self-reporting questionnaire (SRQ-20). *Rev Baiana Saude Publica Miolo*, *V. 34*(3), 544–560.

Savóia, M. G., Santana, P. R., & Mejias, N. P. (1996). Adaptação do inventário de Estratégias de Coping de Folkman e Lazarus para o português. *Psicologia USP*, *7*(1–2), 183–201. http://www.revistas.usp.br/psicousp/article/view/34538

Trindade, L. M. D. F., & Vieira, M. J. (2013). O aluno de medicina e estratégias de enfrentamento no atendimento ao paciente. *Revista Brasileira de Educação Médica*, *37*(2), 167–177. https://doi.org/10.1590/s0100-55022013000200003

Vieira, N. F., Santiago, I., & Pereira, S. (2021). O alto índice de sofrimento emocional em estudantes universitários: uma revisão integrativa de literatura. *Research, Society and Development*, *10*(15), e126101522766. https://doi.org/10.33448/rsd-v10i15.22766

WHO. (1994). *A user's guide to the self reporting questionnaire (SRQ). Geneva, WHO*.

Xavier, A., Nunes, A. I. B. L., & Santos, M. S. dos. (2008). Subjetividade e sofrimento psíquico na formação do Sujeito na Universidade. *Rev. Mal-Estar e Subjetividade*, *8*(2), 427–451. http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1518-61482008000200008