REFACS

Revision
Rev. Fam., Ciclos Vida Saúde Contexto Soc.
http://seer.uftm.edu.br/revistaeletronica/index.php/refacs/index
ISSN: 2318-8413 DOI*:* 10.18554/refacs.v10i3.5718

Coping with the psychological distress of students in the university context: an integrative review

Enfrentamento do sofrimento psíquico de estudantes no contexto universitário: uma revisão integrativa

Afrontamiento del sufrimiento psíquico de estudiantes en el contexto universitario: una revisión integradora

Tatiane Carolina Martins Machado Rodrigues[1], Guilherme Correa Barbosa[2]
Vera Lúcia Pamplona Tonete[2]

Received: 12/08/2021 **Accepted:** 15/05/2022 **Published:** 30/09/2022

Objective: to analyze proposed strategies for coping with psychological distress in university students, in the educational context. **Methods:** integrative review based on original articles published between 2015 and 2020, in English, Spanish or Portuguese, in the following databases: Latin American and Caribbean Health Sciences Literature, Medical Literature Analysis and Retrievel System Online, *Base de Dados da Enfermagem*, *Index da Psicologia*, SCOPUS-Elsevier, Cumulative Index to Nursing and Allied Health Literature. **Results:** 26 articles were considered, with greater publication in 2020 (50%) and 2019 (23.1%); from the Asian continent (46.1%) followed by the American continent (26.9%); referring to students from different training areas, with a quantitative and transversal approach. The systematization of strategies showed: *Strategy for the Detection of Psychic Suffering*; *Strategy for Monitoring and Assessing Psychic Suffering*; and *Strategy for the Prevention of Psychic Suffering*. There was an emphasis on the presentation of several instruments with good psychometric quality and levels of reliability, both for care and for investigations. **Conclusion:** it was found in the production raised successful strategies for the detection, monitoring and evaluation of psychological distress in students, applicable in health units in school institutions, pointing out guidelines for possible care interventions, promotion of mental health and quality of life.
Descriptors: Psychological distress; Students; Adaptation, Psychological.

Objetivo: analisar estratégias propostas para o enfrentamento do sofrimento psíquico em estudantes universitários no contexto educacional. **Método:** revisão integrativa a partir de artigos originais publicados entre 2015 a 2020, nos idiomas inglês, espanhol ou português, nas bases de dados: Literatura Latino-americana e do Caribe em Ciências da Saúde, *Medical Literature Analysis and Retrievel System Online*, Bases de Dados da Enfermagem, Index de Psicologia, SCOPUS-Elsevier, *Cumulative Index to Nursing and Allied Health Literature*. **Resultados:** foram considerados 26 artigos, com publicação maior em 2020 (50%) e 2019 (23,1%); do continente asiático (46,1%) seguido do continente americano (26,9%); referindo-se a estudantes de diferentes áreas de formação, com abordagem quantitativa e transversal. A sistematização de estratégias mostrou: *Estratégia de Detecção do Sofrimento Psíquico*; *Estratégia de Monitoramento e Avaliação do Sofrimento Psíquico*; e *Estratégia de Prevenção do Sofrimento Psíquico.* Houve destaque na apresentação de vários instrumentos com boa qualidade psicométrica e níveis de confiabilidade, tanto para atendimento quanto para investigações. **Conclusão:** verificou-se na produção levantada estratégias exitosas de detecção, monitoramento e avaliação do sofrimento psíquico em estudantes, aplicáveis em unidades de saúde em instituições escolares, apontando diretrizes para possíveis intervenções de cuidado, promoção da saúde mental e qualidade de vida.
Descritores: Angústia psicológica; Estudantes; Adaptação psicológica.

Objetivo: analizar las estrategias propuestas para el afrontamiento del sufrimiento psíquico en estudiantes universitarios en el contexto educativo. **Método**: revisión integradora basada en artículos originales publicados entre 2015 y 2020, en inglés, español o portugués, en las siguientes bases de datos: Literatura Latinoamericana y del Caribe en Ciencias de la Salud, *Medical Literature Analysis and Retrieval System Online*, Bases de Datos de Enfermería, Índice de Psicología, SCOPUS-Elsevier, *Cumulative Index to Nursing and Allied Health Literature*. **Resultados**: Se consideraron 26 artículos, con mayor publicación en 2020 (50%) y 2019 (23,1%); del continente asiático (46,1%) seguido del continente americano (26,9%); referidos a estudiantes de diferentes áreas de formación, con un enfoque cuantitativo y transversal. La sistematización de las estrategias mostró: *Estrategia de Detección del Sufrimiento Psíquico*; *Estrategia de Seguimiento y Evaluación del Sufrimiento Psíquico*; y *Estrategia de Prevención del Sufrimiento Psíquico*. Se hizo hincapié en la presentación de varios instrumentos con buena calidad psicométrica y niveles de fiabilidad, tanto para la atención como para las investigaciones. **Conclusión**: se verificó en la producción levantada estrategias exitosas de detección, seguimiento y evaluación del sufrimiento psíquico en los estudiantes, aplicadas en las unidades de salud en las instituciones escolares, proporcionando directrices para posibles intervenciones de cuidado, promoción de la salud mental y calidad de vida.
Descriptores: Distrés psicológico; Estudiantes; Adaptación psicológica.

Corresponding Author: Tatiane Carolina Martins Machado Rodrigues – E-mail: tatimmr@ufscar.br

1. Ambulatory of the Universidade Federal de São Carlos, Campus Lagoa do Sino, Buri/SP, Brazil.
2. Department of Nursing, Faculdade de Medicina de Botucatu, Universidade Estadual Paulista. Botucatu/SP, Brazil.

INTRODUCTION

Entering university brings changes for students, because, while it signals an achievement, it can become a worrying period of greater personal vulnerability, as it distances the young person from the family nucleus and from the previous circle of friends, inserting them in a context that requires new attitudes and responsibilities[1-2].

The challenges of adapting to university life associated with emotional difficulties, typical of this stage of the evolutionary cycle, can expose young students to stress, increasing their vulnerability to psychic suffering, triggering psychopathological symptoms that can evolve into mental disorders[3].

Psychic suffering can be defined as a set of discomforts and difficulties in living with the contradictory diversity of existential meanings, associated with difficulties in establishing plans, defining the meaning of life, or even relating to the feeling of impotence and internal emptiness[4-5]. As negative consequences of this suffering, with regard to the training process, the following have been reported: absenteeism, requests to cancel enrollments and school dropout[1].

Considering the epidemiological and educational importance, the relevance of providing collective and individual resources for appropriate care for the early detection of complaints/symptoms in university students emerges, as well as providing follow-up by health professionals in the detected cases, with a view to favoring therapeutic actions immediate steps to intervene as quickly as possible, seeking to minimize suffering and prevent its consequences[6]. In order to provide interventions that are not only based on the biomedical approach, but also on others, which expand the possibilities of modifying and qualifying the conditions and ways of life, focusing on the production of life and health[7].

Thus, this study aims to analyze proposed strategies for coping with psychological distress in university students, in the educational context.

METHODS

This is an integrative review (IR) developed to obtain theoretical support on the recommended strategies for coping with the psychological distress of university students in the educational context. IR allows analysis and synthesis of scientific production, based on the question of interest of study, showing new methods and concepts, in addition to identifying gaps in knowledge. It is proposed that the IR be prepared following these steps: identification of theme/question for the elaboration of the research; definition of criteria for inclusion and

exclusion of studies; definition of information to be used; analysis and interpretation of results and presentation of the synthesis of knowledge[8].

The question to be answered by this IR was elaborated based on the PICo[9] strategy, for non-clinical research, where P = Population/Patient/or Problem – Psychic distress in university students; I = Interest – Coping strategies for psychological distress; Co = Context – Universities. Thus, the aforementioned question consisted of: *What types of strategies are recommended for coping with the student's psychic suffering in the university context?*

The searches were carried out in May and June 2019 and updated in March 2021 in the Latin American and Caribbean Health Sciences Literature (LILACS), SCOPUS, CINAHL, Medical Literature Analysis and Retrievel System Online (MEDLINE), databases specialized bibliographic databases in the area of Nursing (BDENF) and Psychology (INDEX PSICOL). These databases were chosen for the extent of scanning they allow, including internationally, specialized and multidisciplinary productions.

In the searches, Descriptors in Health Sciences (DeCs) and Medical Subject Headings of the U.S. were used. National Library of Medicine (Mesh) controlled and combined with Boolean operators: "*Sofrimento Mental*/Suffering Mental" OR "*Saúde Mental*/Mental Health" AND "*Avaliação*/Evaluation" OR "*Intervenção*/Intervention" OR "*Atendimento*/Attendance" AND "*Estudantes*/Students" OR "*Universidade*/University" OR "*Faculdade*/College".

The inclusion criteria were: original articles, available in full, published in English, Spanish or Portuguese, in Brazilian and international journals, between January 2015 and December 2020 and that had content to answer the previously defined study question. Articles that were repeated in the different databases used were excluded.

The articles found were analyzed after careful reading of titles and abstracts and those selected were submitted to full reading and the characterization of the *corpus* of analysis was carried out.

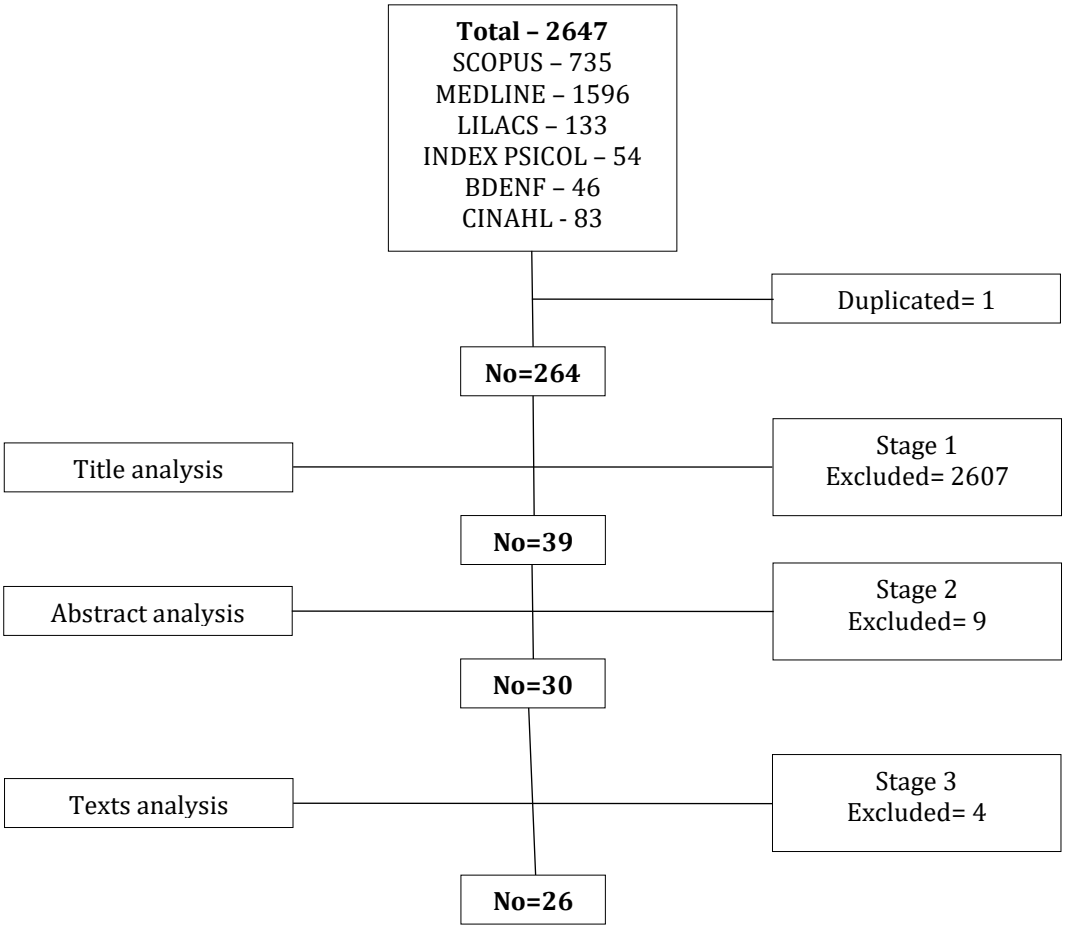
The presentation of the results was carried out in a descriptive way, and the content identified in the included articles was systematized and grouped into categories allowing a better understanding of the data.

RESULTS

By combining the descriptors, 2647 publications were identified. After analyzing the titles and applying the inclusion criteria, 2607 were excluded and one per repetition, leaving 39 articles. By analyzing the abstracts, nine publications were excluded, forming a set of 30 articles. Of these, four articles were excluded, as two could not be accessed in full, one did not

refer to university students and one did not answer the guiding question, thus comprising the final sample of 26 articles (Figure 1).

Figure 1. Stages in the selection of articles on recommended strategies for coping with psychological distress in university students. Brazil, 2020.



Regarding the characteristics of the publications of the 26 studies included in this IR, Table 1 shows the universal distribution of countries of origin, coming from countries on five continents, with a predominance of the Asian continent (one from Jordan, one from India, one from Malaysia , one from Pakistan, two from South Korea, one from Indonesia, one from the Philippines, one from the UAE, two from China and one from Iran), followed by the American continents (one from Canada, two from the USA, one from Trinidad and Tobago and three from Brazil), European (one from Italy, one from the United Kingdom and two from Germany), from Africa (two from Ethiopia) and from Oceania (one from Australia).

Regarding the area of knowledge of the journals in which they were published, most were linked to Mental Health. The prevailing language in which these articles were published

was English, and the year with the highest concentration of publications was 2020, with a higher frequency of research with students from areas other than the Health area. In turn, in the health area, 23% were linked to the medical course, 14% to psychology, 6% to nursing and/or midwifery and 3% to medicine and engineering (Table 1).

Table 1. Studies included in the IR according to publication characteristics and target population. Brazil, 2015-2020.

Variables	No	%
Year of publication of study		
2015	2	7.7
2016	1	3.8
2017	2	7.7
2018	2	7.7
2019	6	23.1
2020	13	50.0
Continent of origin of study		
Asia	12	46.1
America	7	26.9
Europe	4	15.4
Africa	2	7.7
Oceania	1	3.9
Area of knowledge of journal		
Mental health	11	43
Others	15	57
Language of publication		
English	23	88
Others	3	12
Course of approached students		
Medicine	6	23
Psychology	3	14
Nursing or Midwifery	2	6
Medicine and Engineering	1	3
Other areas	14	54

As for the objectives, the included studies could be equally subdivided into those that mainly proposed to study *aspects related to the occurrence of psychological distress* (OPD) (50%), and those that turned to work on *coping strategies for this condition* (CSPD) (50%). Most of the studies used a quantitative research approach (92%), with 50% of these studies being cross-sectional and descriptive (Chart 1).

Chart 1. Studies selected according to objectives and methodological aspects, in order of publication. Brazil, 2020.

Article/Author(s)/ Publication Year/ Country	Main Objective	Main objective focus*	Approach/ Type of study
A[10] /RAHMAN et al./ 2015/ Malaysia	Understand the strains senior students are experiencing as they wait for the professional exam.	OPD	Quantitative/ Transversal
B [11]/KIM; ZANE/ 2015/ USA	Apply the psychological and social theoretical framework of the health belief model to understand reasons why university students underuse mental health services.	CSPD	Quantitative/ Transversal
C[12]/YOUSSEF/ 2016/ Trinidad and Tobago	Explore the prevalence of stress, burnout, depressive symptoms and associated risk factors among students.	OPD	Quantitative/ Transversal
D[13]/NGUYEN-FENG; GREER; FRAZIER/ 2017/ USA	To investigate the effectiveness of interventions performed on the Internet to reduce perceived stress and stress levels with and without a history of trauma.	CSPD	Quantitative / Randomized clinical trial
E[14]/BIOLCATI; AGOSTINI; MANCINI/ 2017/ Italy	To evaluate the therapeutic efficacy of analytical psychodrama groups for college students with psychological problems.	CSPD	Quantitative / prospective cohort
F[15]/GALANTE et al./ 2018/ United Kingdom	Assess whether offering a mindfulness course improves resilience to stress.	CSPD	Quantitative / Randomized clinical trial
G[16]/KRISHNAPPA et al./2018/ India	To estimate the prevalence of stress among university students.	OPD	Quantitative/ Transversal
H[17]/MA; RUENSUK; KIM/ 2019/ South Korea	Reveal causes of problems, discover coping techniques, and explore designer interventions that can improve the quality of mental health.	CSPD	Qualitative / descriptive and interpretive
I[18]/DALKY; GHARAIBEH/ 2019/ Jordan	Measure depression, anxiety and stress among college students and explore their knowledge of available mental health services.	OPD	Quantitative/ Transversal
J[19]/KEBEDE; ANBESSIE; AYANO/ 2019/ Ethiopia	To determine the prevalence and associated factors of depression and anxiety among medical students.	OPD	Quantitative/ Transversal
K[20]/KÜCHLER et al./ 2019/ Germany	To assess the effectiveness and acceptability of an internet-based and mobile-based intervention for procrastination in college students.	CSPD	Quantitative / Randomized clinical trial
L[21]/MALAJOVICH et al./2019/ Brazil	To describe the approach to subjective urgency in a mental health care program for higher education students.	CSPD	Qualitative / Descriptive and Interpretive
M[22]/MOTTA; SOARAES; BELMONTE/ 2019/ Brazil	To verify the sociodemographic, psychiatric and family profile of medical students in a federal institution.	OPD	Mixed / Transversal and Inferential
N[23]/MENDES; MARTINO/ 2020/ Brazil	To identify the stress factors of the university environment and the repercussions on the quality of sleep and life of students in their final year of graduation.	OPD	Quantitative/ Transversal
O[24]/CHEN; CHANG; STUART/	Validate a tool composed of six items that guide the student on how to understand, or	CSPD	Quantitative/ Transversal

2020/ Canada	monitor, signs and behavioral indicators of their mental health status and suggest appropriate actions to improve mental health.		
P[25]/LEE; LEE/ 2020/ South Korea	To investigate the effect of self-compassion on the relationship between academic demand, burnout and depression.	CSPD	Quantitative/ Transversal
Q[26]/SIDDIQUI et al./ 2020/ Pakistan	To study depression among medical and engineering students from different faculties of medicine and engineering.	OPD	Quantitative / Comparative cross
R[27]/CENTENO; FERNADEZ/ 2020/ Philippines	To examine the effectiveness of an adapted mindfulness-based cognitive therapy program.	CSPD	Quantitative / Quasi-experimental design
S[28]/HARRINGTON; ERES; LIM/ 2020/ Australia	Examine the feasibility, acceptability, safety, and effectiveness of an existing web-based cognitive behavioral therapy (CBT) program.	CSPD	Quantitative / Randomized clinical trial
T[29]/AWADALA; DAVIES; GRAZEBROOK/ 2020/ United Arab Emirates	To determine the prevalence of depression and anxiety in college students and explore the relationship between emotional difficulties and academic performance.	OPD	Quantitative / Longitudinal
U[30]/NEGASH et al./ 2020/ Ethiopia	To assess the prevalence of mental distress, perceived need for professional mental health care, and barriers to providing services to university students.	OPD	Quantitative/ Transversal
V[31]/QI et al./ 2020/ China	To compare the relative importance of yoga practice focused on meditation and breathing in retaining energy and reducing related stress in a group of undergraduate students.	CSPD	Quantitative/ Transversal
W[32]/LEE et al./ 2020/ China	Outline the prevalence of burnout in students and examine associated demographic and lifestyle factors.	OPD	Quantitative/ Transversal
X[33]/VOSS et al./ 2020/ Germany	Evaluate a mindfulness-based training program for college students to reduce stress levels.	CSPD	Quantitative / Randomized clinical trial
Y[34]/REZAEI; FALAHATI; BEHESHTIZADEH2020 /Iran	Explore perceived stress and stressors as well as the relationships between stress and related factors in the clinical learning environment.	OPD	Quantitative/ Transversal
Z[35]/PUSPITASARI et al./2020/ Indonesia	To identify perception, knowledge and attitudes towards mental health disorders and their treatment among university students.	OPD	Quantitative/ Transversal

*C**SPD:** Coping Strategies for Psychic Distress; **OPD:** Occurrence of Psychic Distress.

The integrated analysis of the articles made it possible to systematize strategies, namely: *Strategy for the Detection of Psychic Distress* (SDPD); *Strategy for Monitoring and Evaluating Psychic Distress* (SMEPD); and *Strategy for the Prevention of Psychic Distress* (SPPD) (Chart 2).

Chart 2. Strategies for coping with the psychological distress of university students applicable in the educational context. Brazil, 2015-2020.

Article/Proposed Strategy(s)	**Strategy Purpose***	**Tools****
A[10]/Carrying out and deepening research and work to determine academic training programs, assessment systems and support systems for university students that do not cause increased	Create support activities for students who are suffering.	MSSQ 40 GHQ -12

stress.		
B[11]/Promotion of seeking help from mental health services and publicizing these spaces.	Encourage the search for mental health services.	K6
C[12]/Early detection effective intervention Spiritual support.	Detect suffering early and intervene with actions that reduce these symptoms.	MBI PMSS PHQ-9
D[13]/Internet-based stress management programs. Mindfulness course to reduce stress scores Specific approaches for certain subgroups of students.	Encourage activities that reduce stress.	DASS 21 TLEQ PSS
E[14]/Conducting periodic meetings in analytical psychodrama groups.	Decrease symptoms of stress and improve well-being.	GAS CORE-OM
F[15]/Offering mindfulness courses.	Reduce stress scores.	CORE-OM
G[16]/Early detection. Effective intervention	Detect suffering early and intervene with actions that reduce these symptoms.	MSSQ 40
H[17]/Use of relaxation, self-knowledge, problem-solving, emotional sharing and socialization techniques.	Decrease symptoms of stress.	
I[18]/Promoting awareness of available resources and encouraging access.	Encourage the search for mental health services.	DASS 21
J[19]/Screening students for mental health problems.	Detect suffering early.	HADS
K[20]/Internet intervention aimed at procrastination.	Decrease procrastination in college students	IPS STS SWEPHQ 9 GAD7 PSS OMS5
L[21]/Welcoming and listening, open spaces for reflection and formation of support networks.	Welcoming and creating spaces for socialization and support.	
M[22]/Establishment of a teaching environment with spaces and scenarios that identify suffering early and promote the integration of young people to continue with quality at the university until the conclusion of the course.	Detect suffering early and intervene with actions that reduce these symptoms.	Mini International Neuropsychiatric Interview, versão 5.0.0
N[23]/Early identification, health promotion through welcoming, information booklets on stress, sleep and preventive measures. Actions with the participation of other professionals of the institution.	Detect suffering early, encourage the search for information and involve all university professionals in actions that help reduce student stress.	ASNS PSQI
O[24]/Use a useful tool that helps college students reflect on and improve their mental health.	Encourage students to self-knowledge to improve their mental health.	MHC K-10
P[25]/Mindfulness course (full attention) to increase self-compassion.	Encourage self-compassion to moderate the development of depression.	SCS MBI SS CES D
Q[26]/Creation of support and counseling groups in medical and engineering courses.	Groups that provide support to students.	HAM D
R[27]/Mindfulness courses (full attention).	Provide an opportunity to engage college students who may be reluctant to seek support through traditional face-to-face mental health services.	FFMQ SCS

S[28]/Web support program.	Improve empathy and self-compassion. Provide an opportunity to engage college students who may be reluctant to seek support through traditional face-to-face mental health services.	
T[29]/Appropriate support, including evidence-based therapies.	Improve student development, decreasing depression and anxiety.	PHQ-9 GAD-7
U[30]/Improve mental health care spaces, excluding barriers to access and paying attention to dealing with disparity.	Empathize with empathy.	SRQ-20 BACE-30
V[31]/Meditation, through the practice of Yoga with a focus on breathing.	Encourage the use of psychological resources to cope with stress	MAAS DASS
W[32]/Encourage research to design and establish the effectiveness of lifestyle intervention programs that increase exercise level and sleep quality.	Improve quality of life	MBI AUDIT-C PSQI GSLTPA
X[33]/Offering mindfulness courses.	Reduce stress.	
Y[34]/Support strategies by clinical instructors and creating a supportive environment can be helpful.	Decrease stress in the study environment.	PSS
Z[35]/Awareness programs and campaigns focusing on mental health disorders and their treatment should be implemented to increase students' perceptions, knowledge and attitudes.	Improve student awareness of suffering and encourage treatment.	Adapted questionnaires on perception, knowledge and attitude

*SDPD: Strategy for Detection of Psychic Distress; SMEPD: Strategy for Monitoring and Evaluation of Psychic Distress; SPPD: Strategy for Prevention of Psychic Distress.
**MSSQ 40: Medical Student Stressor Questionnaire; GHQ 12: General Health Questionnaire; K6: Kessler Scale for Psychological Distress; MBI: Maslach Burnout Inventory; PMSS: Perceived Medical School Stress Scale; PHQ 9: Patient Health Questionnaire-9; DASS 21: Depression, Anxiety and Stress Scale; TLEQ: Traumatic Life Events Questionnaire; PSS: Perceived Stress Scale; GAS: Global Rating Scale; CORE-OM: Clinical Outcome Routine Evaluation – Outcome Measure; MSSQ 40: Medical Student Stressor Questionnaire; DASS 21: Depression, Anxiety and Stress Scale; HADS: Hospital Anxiety and Depression Scale; IPS: Irrational Procrastination Scale; STS: Scale of Susceptibility to Temptation; SWE: General Self-Efficacy Scale; GAD 7: Generalized Anxiety Disorder Scale; WHO 5: World Health Organization Well-Being Index; Mini International Neuropsychiatric Interview; ASNS: Assessment of Stress in Nursing Students; PSQI: Pittsburgh Sleep Quality Index; MHC: Mental Health Continuum; SCS: Self-Compassion Scale; CES D: Center for Epidemiologic Studies Depression; HAM D: Hamilton Depression Scale; FFMQ: Five Facet Mindfulness Questionnaire; SRQ-20: Self-Reported Questionnaire; BACE-30: Barriers to Access to Care Assessment; MAAS: Mindful Attention and Awareness Scale; AUDIT-C: Alcohol Use Disorders Identification Test; GSLTPA: Godin-Shephard Leisure-Time Physical Activity.

DISCUSSION

The instruments mentioned in the studies considered were characterized as having good psychometric quality and levels of reliability, making it possible to verify their contributions to the purposes established in each researched situation.

Among the successful strategies for coping with the psychological distress of university students, those that make it possible to promote the search for support by university students[5,12,18]. The coping strategies used confirmed that early detection and effective intervention can prevent future diseases[12,16,22].

Among such strategies are the offering of Mindfulness courses[13,15,20,27,33]. Mindfulness is a secular group skills and training program based on the textbook *Mindfulness: A Practical Guide to Finding Peace in a Frantic World*, adapted for college students[36].

This program is a comprehensive mental health strategy, including offering this type of intervention openly to students, separate from specific mental health services, and is seen as a useful complement to clinical interventions that can help students accept or set aside aspects stress factors that are uncontrollable[13,15,33], helping to maintain good mental health in university students[27].

Another practice, also related to Mindfulness, Yoga with a focus on breathing, maintains attention and awareness and reduces stress in university students[31].

With the aim of improving students' well-being and reducing symptoms of psychological problems, analytic psychodrama groups held periodically have proved to be a technique that can help students feel more confident[14].

Spiritual support[12] and self-compassion[25,27] were also listed as important strategies, and with better spiritual health and feelings of self-compassion, there is a tendency for weaker depression, being less affected by stress and burnout and more likely to be involved in health promotion behaviors[12,32]. Compassion can be strengthened through the practice of mindfulness[27].

Welcoming and listening can function as a temporal operator of interventions for the comprehensive health care of students who manifest symptoms of mental distress, welcoming them in a timely manner, but with no rush, establishing the necessary time to help them. them to find tools to face their impasses[21].

And for students who might be reluctant to seek support through traditional face-to-face mental health services, web-based programs have been identified, which offer the opportunity to support vulnerable college students who are unlikely to seek support otherwise[28]. These tools guide how to understand or monitor behavioral signs and indicators of their mental health states and suggest appropriate actions for their improvement[24].

The intervention carried out over the internet proved to be easy to apply and cost-effective, with effective support for overcoming procrastination, which may be related to generalized anxiety disorder or depression[10].

In addition to these proposals, a set of five strategies was suggested, among them relaxation to use one of the five senses and calm the mind; recognize the situation before it gets worse (self-knowledge); think of a solution that helps to stop the situation and refresh the mind; sharing of emotions and socialization[17].

The formation of support networks was presented as a fundamental strategy for overcoming obstacles in student life, maintaining a frank and open dialogue about problems

and collectively building strategies to overcome them, forming bonds between students, teachers and technicians[21].

It is essential to recognize what is already done daily in the school environment and what the territory where the school institution is inserted has to offer as a resource to contribute to the management and control of this disease.

Some mental health actions have been carried out without the professionals even realizing them in their practice, such as support actions: discussion of cases, joint care or not; interconsultation; joint construction of therapeutic projects; Permanent Education; interventions in the territory and in the health of population groups and the community; intersectoral actions for prevention and health promotion; and, discussion of the teams' work process[7].

In addition, system-wide initiatives that include university administrators, instructors, counselors, academics, nurses, and other health professionals in promoting mental health that combine awareness-raising efforts that emphasize the benefits of seeking services have been indicated as promising approaches to address the underutilization of mental health services or even the creation of them[10,11].

It also brings the importance of carrying out and deepening research and works to determine academic training programs, evaluation systems and support for university students[10].

It is up to higher education institutions to facilitate this transition from the context of distancing from family and friends and acquiring greater autonomy and independence, from the high school to higher education model, promoting the creation of contexts that aim at the total integration of young people for the continuation with quality at the university until the conclusion of the course, being concerned with knowing and promoting the quality of life and health of its students[6,22].

The results of this IR support the recommendation to provide special attention to students, through preventive care strategies and monitoring/assessment of students' psychological distress and mental health promotion in the school context, as well as ensuring relevant therapeutic care in partnership with specialized health services/professionals, aiming at networking, with the direct and participatory involvement of the entire academic community.

The studies surveyed brought fundamental contributions to constitute strategies and services dedicated to the care of mental health and quality of life of university students, which minimize the risks of developing psychological distress.

In the subsidiary findings of the present IR, it was possible to relate instruments used to detect signs and symptoms of psychic suffering and related mental disorders, and those recommended for monitoring and evaluating the mental health situation before and after interventions to face this problem.

The Hamilton Rating Scale for Depression (HAM D)[26] was built in the 1960s to be used exclusively in patients previously diagnosed with depressive-type affective disorder, due to the design and choice of its items, which serve to identify the severity of depressive symptoms, and not their existence.[37].

The General Health Questionnaire (GHQ12) detects non-severe psychiatric illnesses[38] and was used together with the Medical Student Stressor Questionnaire (MSSQ 40) with medical students[10].

The Hospital Anxiety and Depression Scale (HADS) developed in the 1980s with the purpose of identifying cases (possible or probable) of mild anxiety and/or depression disorders[39] was used to screen for depression and anxiety in medical students[32].

The Mini International Neuropsychiatric Interview (Mini), version 5.0.0, compatible with the DSM-IV criteria, is a brief diagnostic interview attributed to use in clinical practice and research in primary care and psychiatry, and was also used with medical students to check for psychiatric disorders[22].

Regarding the questionnaires, we found those adapted on perception, knowledge and attitude[35] and others such as: Alcohol Use Disorders Identification Test (AUDIT-C), used to assess the drinking habit[32]; Godin-Shephard Leisure-Time Physical (GSLTPA) used to assess exercise habits among college students[32] and the Pittsburgh Sleep Quality Index (PSQI), used in medical[32] and nursing[23] students to assess sleep quality.

The Maslach Burnout Inventory (MBI) is an instrument used exclusively for the assessment of Burnout Syndrome, not taking into account the antecedent components and consequences of its process[40], this same scale was used and academic burnout explained the relationship between the academic demands and depression in medical students[12,32].

The Perceived Stress Scale (PSS)[12,34] is an instrument applied to assess the perception of stress and the individual's perception of how unpredictable and uncontrollable the life events experienced in the last month seem, and it was used in medical students - Perceived Medical School Stress (PMSS)[12] and in obstetrics students[34].

The Stress Scale (PSS) stands out for the brevity of the instrument, which favors its application in conjunction with other measures, being used together with the Depression, Anxiety and Stress Scale - Short Form (DASS 21) and the Traumatic Life Events Questionnaire

(TLEQ)[13] in psychology course students to investigate the effectiveness of interventions carried out on the Internet to reduce stress with and without a history of trauma, showing that such interventions teach skills to focus and consequently reduce stress[13] and used together to other scales to assess the effectiveness and acceptability of an internet-based intervention for procrastination[20].

The Depression, Anxiety and Stress Scale (DASS)[13,18,31] can be used to measure stress through questions in which participants indicate the degree to which they experience each of the symptoms described in the items during the last week.

Regarding student procrastination, the scales used were Irrational Procrastination Scale (IPS), Generalized Anxiety Disorder Scale (GAD 7), World Health Organization Well-Being Index (WHO 5) and as potential mediators the Scale of Susceptibility to Temptation (STS) and the General Self-Efficacy Scale (SWE) measuring sensitivity to distractions and immediate gratification and perceived self-efficacy[20].

Another scale that has been identified as a reliable and adequate measure to assess the symptoms of generalized anxiety in different clinical contexts is the Generalized Anxiety Disorder 7 (GAD-7)[29]. The WHO 5 has good diagnostic properties and was used to assess subjective psychological well-being[20].

The Kessler Scale for Psychological Distress (K)[41], designed to assess non-specific depressive and anxious symptoms in the last 30 days, is an instrument that identifies distress, being used in the K6[11] version to understand the reasons why psychology students underuse services of mental health and in the K10 version, along with the psychometric test of the Mental Health Continuum (MHC)[24] model, with students from different areas to help them reflect and improve their mental health.

In a study designed to assess the prevalence of mental distress, perceived need for professional mental health care and barriers to providing services to university students, the Self-Reported Questionnaire (SRQ-20) and Barriers to Access to Care Assessment (BACE-30) scales were used, showing that they are useful tools to address the disparity between mental suffering and scarcity of care[30].

The Self-Compassion Scale (SCS)[27,32] was used to measure students' self-compassion, being a valid instrument for health research and intervention environments, used with the Center for Epidemiologic Studies Depression (CESD) scale, to measuring current levels of depression and the Maslach Burnout Inventory Student Survey (MBISS) suggesting that, although students with a high level of self-compassion may feel drained by academic demands,

this would not progress to depression, i.e., self-compassion has shown the possibility of moderate the development of depression in the academic environment[25].

And with psychology students, the SCS was used in conjunction with the Five Facet Mindfulness Questionnaire (FFMQ), which is a mindfulness measure commonly used to assess change before and after mindfulness-based interventions revealing that this practice can improve empathy and self-compassion helping students' mental health[27].

Like the FFMQ, the Mindful Attention and Awareness Scale (MAAS) was also used to assess mindfulness, determining the frequency with which each situation occurs[31].

With nursing students, to assess the reasons for stress in the university environment and the repercussions on the quality of sleep and life, the Assessment of Stress in Nursing Students (ASNS) and Pittsburgh Sleep Quality Index (PSQI) instruments were used, pointing out that stress factors were associated with poor sleep quality and changes in quality of life[23].

The Clinical Outcome Routine Evaluation – Outcome Measure (CORE-OM)[14,15] is an European self-report instrument to measure mental health in adults and is adapted for more than 20 countries, being commonly used in hospital clinical contexts, occupational and educational, as well as in the assessment of the quality of mental health services[15].

The Global Rating Scale (GAS), used with the CORE-OM[14], serves to assess the general functioning of a subject during a specified period of time, in a continuum of psychological or psychiatric illness[14].

For screening for major depressive episodes, the Patient Health Questionnaire-9 (PHQ9)[12,20] scale was used.

Summarizing, the instruments listed in this review study proved to be tools to support the early detection of psychological distress, as well as to monitor and evaluate the detected cases.

CONCLUSION

This review made it possible to draw an overview of the possibilities of coping with the psychic suffering of students in a university context, also helping to relate different instruments for the detection, monitoring and/or evaluation of this condition, applicable both in care provided in health services of educational institutions and in research on this topic.

As limitations, there is the reduced number of studies referring to coping strategies, which points to the need for more research in this area.

In addition, in a universal and relevant way, psychological distress in university students has been shown to be an emerging public health problem and that interventions to face it,

whether they are mental health promotion, evaluation and monitoring or treatment, should be adopted as a priority by school institutions in partnership with extramural health services.

REFERENCES

1. Gomes C, Araújo CL, Comonian JO. Sofrimento psíquico na universidade: uma análise dos sentidos configurados por acadêmicos. Rev Psicol Divers Saude [Internet]. 2018 [cited in 12 Apr 2020]; 7(2):255-66. Available from: https://www5.bahiana.edu.br/index.php/psicologia/article/view/1909/1830
2. Cerchiari EAN, Caetano D, Faccenda O. Utilização do serviço de saúde mental em uma universidade pública. Psicol Ciênc Prof. [Internet]. 2005 [cited in 8 July 2020]; 25(2):252-65. Available from: https://www.scielo.br/j/pcp/a/T9hPBSm9XbWKxKBfTsdRjGv/?format=pdf&lang=pt
3. Botti N, Monteiro A, Benjamim M, Queiroz L. Depressão, uso de drogas, ideação e tentativa de suicídio entre estudantes de enfermagem. Rev Enferm UFPE on line [Internet]. 2016 [cited in 11 June 2020]; 10(7):2611-6. Available from: https://periodicos.ufpe.br/revistas/revistaenfermagem/article/view/11321
4. Fernandes MA, Vieira FER, Silva JS, Avelino FVSD, Santos JDM. Prevalence of anxious and depressive symptoms in college students of a public institution. Rev Bras Enferm. [Internet]. 2018 [cited in 14 June 2022]; 71(Suppl5):2169-75. Available from: https://www.scielo.br/j/reben/a/JwkL4F3S5DQGkmvx5ZP7cYQ/?format=pdf&lang=en
5. Schneider JF, Tonini NS, Maraschin MS, Durman S, Dias TA, Tomazzoni MI. Indicadores do sofrimento psíquico na zona urbana do município de Cascavel, estado do Paraná. Acta Sci, Health Sci. [Internet]. 2008 [cited in 14 jun 2022]; 25(1):27-33. Available from: https://ur.booksc.me/book/82422929/121c25
6. Osse CMC, Costa II. Saúde mental e qualidade de vida na moradia estudantil da Universidade de Brasília. Estud Psicol. [Internet]. 2011 [cited in 14 June 2022]; 28(1):115-22. Available from: https://www.scielo.br/j/estpsi/a/jXj8kc8WmhVHGsY3J3Y9Stn/?format=pdf&lang=pt
7. Brasil. Ministério da Saúde. Saúde mental. Brasília: Ministério da Saúde; 2013.
8. Soares CB, Hoga LAK, Peduzzi M, Sangaleti C, Yonekura T, Silva DRAD. Integrative review: concepts and methods used in nursing. Rev Esc Enferm USP. [Internet]. 2014 [cited in 12 June 2020]; 48(2):329-39. Available from: https://www.revistas.usp.br/reeusp/article/view/84097/86949
9. Oliveira Araújo WC. Recuperação da informação em saúde: construção, modelos e estratégias. ConCI [Internet]. 2020 [citado 20 June 2022];3(2):100-34. Available from: https://seer.ufs.br/index.php/conci/article/view/13447
10. Rahman NIA, Ismail SB, Ali RM, Alattraqchi AG, Dali WPEW, Umar BU, et al. Stress among first batch of MBBS students of Faculty of Medicine and Health Sciences, University Sultan Zainal Abidin, Malaysia: when final professional examination is knocking at the door. International Medical Journal [Internet]. 2015 [cited in 14 June 2022]; 22(4):254-9. Available from: https://www.researchgate.net/publication/281265139_Stress_among_First_Batch_of_MBBS_Students_of_Faculty_of_Medicine_and_Health_Sciences_Universiti_Sultan_Zainal_Abidin_Malaysia_When_Final_Professional_Examination_is_Knocking_at_the_Door
11. Kim JE, Zane N. Help-seeking intentions among Asian American and White American students in psychological distress: application of the health belief model. Cultur Divers Ethnic Minor Psychol. [Internet]. 2015 [cited in 14 June 2022]; 22(3):311-21. Available from: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4688246/pdf/nihms696390.pdf

12. Youssef FF. Medical student stress, burnout and depression in Trinidad and Tobago. Acad Psychiatry [Internet]. 2016 [cited in 14 June 2022]; 40(1):69-75. DOI: 10.1007/s40596-015-0468-9
13. Nguyen-Feng VN, Greer CS, Frazier P. Using online interventions to deliver college student mental health resources: evidence from randomized clinical trials. Psychol Serv. [Internet]. 2017 [cited in 14 jun 2022]; 14(4):481-9. DOI: 10.1037/ser0000154
14. Biolcati R, Agostini F, Mancini G. Analytical psychodrama with college students suffering from mental health problems: preliminary outcomes. Res Psychother. [Internet]. 2017 [cited in 14 June 2022]; 20(3):272. DOI: 10.4081/ripppo.2017.272
15. Galante J, Dufour G, Vainre M, Wagner AP, Stochl J, Benton A, et al. A mindfulness-based intervention to increase resilience to stress in university students (the Mindful Student Study): a pragmatic randomised controlled trial. Lancet Public Health [Internet]. 2018 [cited in 14 June 2022]; 3(2):e72-81. DOI: 10.1016/S2468-2667(17)30231-1
16. Krishnappa K, Singh N, Jain PK, Sharma A, Mehra J, Nayak KS. Medical school and stress: a cross-sectional study of stress among medical students in Uttar Pradesh University of medical sciences in district Etawah. Indian Journal of Community Health [Internet]. 2018 [cited in 14 June 2022]; 30(3):239-46. Available from: https://www.iapsmupuk.org/journal/index.php/IJCH/article/view/845?articlesBySameAuthorPage=2
17. Ma S, Ruensuk M, Kim C. Design interventions for promoting the mental health of young academics. In: Proceedings of the 22nd International Conference on Engineering Design (ICED19) [Internet]; 2019; Delft, The Netherlands: Ulsan National Institute of Science and Technology; 2019 [cited in 14 June 2022]. DOI: 10.1017/dsi.2019.95
18. Dalky HF, Gharaibeh A. Depression, anxiety, and stress among college students in Jordan and their need for mental health services. Nurs Forum. [Internet]. 2019 [cited in 14 June 2022]; 54(2):205-12. DOI: https://doi.org/10.1111/nuf.12316
19. Kebede MA, Anbessie B, Ayano G. Prevalence and predictors of depression and anxiety among medical students in Addis Ababa, Ethiopia. Int J Ment Health Syst. [Internet]. 2019 [cited in 14 June 2022]; 13:30. DOI: 10.1186/s13033-019-0287-6
20. Küchler AM, Albus P, Ebert DD, Baumeister H. Effectiveness of an internet-based intervention for procrastination in college students (StudiCare Procrastination): study protocol of a randomized controlled trial. Internet Interv. [Internet]. 2019 [cited in 14 June 2022]; 17:100245. DOI: 10.1016/j.invent.2019.100245
21. Malajovich Muñoz N, Vilanova A, Tenembaum D, Bastos Velasco L. O manejo da urgência subjetiva na universidade: construindo estratégias de cuidado à saúde mental dos estudantes. Interacao Psicol. [Internet]. 2019 [cited in 17 Apr 2020]; 23(2):177-83. Available from: https://revistas.ufpr.br/psicologia/article/view/58547/39214
22. Motta ICM, Soares RCM, Belmonte TSA. Uma investigação sobre disfunções familiares em estudantes de medicina. Rev Bras Educ Méd. [Internet]. 2019 [cited in 14 June 2022]; 43(1Supl1):47-56. Available from: https://www.researchgate.net/publication/338560636_Uma_Investigacao_sobre_Disfuncoes_Familiares_em_Estudantes_de_Medicina/fulltext/5e1d2bf2a6fdcc28377124b0/Uma-Investigacao-sobre-Disfuncoes-Familiares-em-Estudantes-de-Medicina.pdf
23. Mendes SS, Martino MMF. Stress factors of nursing students in their final year. Rev Esc Enferm USP [Internet]. 2020 [cited in 14 June 2022]; 54:e03593. DOI: 10.1590/s1980-220x2018053903593
24. Chen SP, Chang WP, Stuart H. Self-reflection and screening mental health on Canadian campuses: validation of the mental health continuum model. BMC Psychology [Internet]. 2020 [cited in 14 June 2022]; 8:76. DOI: 10.1186/s40359-020-00446-w
25. Lee KJ, Lee SM. The role of self-compassion in the academic stress model. Curr Psychol. [Internet]. 2020 [cited in 15 maio 2020]; 41:3195-204. DOI: 10.1007/s12144-020-00843-9

26. Siddiqui NA, Fatima S, Taj FB, Shahid A, Moosa ZA. Depression among undergraduate medical and engineering students: a comparative study. Pak J Med Sci. [Internet]. 2020 [cited in 14 June 2022]; 36(5):1096-9. DOI: 10.12669/pjms.36.5.1858
27. Centeno RPR. Effect of mindfulness on empathy and self-compassion: an adapted MBCT Program on Filipino College Students. Behav Sci (Basel) [Internet]. 2020 [cited in 15 June 2022]; 10(3):61. DOI: 10.3390/bs10030061
28. Harrington KD, Eres R, Lim MH. The web-based uprise program for mental health in australian university students: protocol for a pilot randomized controlled trial. JMIR Res Protoc. [Internet]. 2020 [cited in 15 June 2022]; 9(12):e21307. DOI: 10.2196/21307
29. Awadalla S, Davies EB, Glazebrook C. A longitudinal cohort study to explore the relationship between depression, anxiety and academic performance among Emirati university students. BMC Psychiatry [Internet]. 2020 [cited in 15 June 2022]; 20(1):448. DOI: 10.1186/s12888-020-02854-z
30. Negash A, Khan MA, Medhin G, Wondimagegn D, Araya M. Mental distress, perceived need, and barriers to receive professional mental health care among university students in Ethiopia. BMC Psychiatry [Internet]. 2020 [cited in 15 June 2022]; 20(1):187. DOI: 10.1186/s12888-020-02602-3
31. Qi X, Tong J, Chen S, He Z, Zhu X. Comparing the psychological effects of meditation and breathing-focused yoga practice in undergraduate students. Front Psychol. [Internet]. 2020 [cited in 15 June 2022]; 11:560152. Available from: https://www.frontiersin.org/articles/10.3389/fpsyg.2020.560152/full
32. Lee KP, Yeung N, Wong C, Yip B, Luk LHF, Wong S. Prevalence of medical students' burnout and its associated demographics and lifestyle factors in Hong Kong. PLoS One [Internet]. 2020 [cited in 15 June 2022]; 15(7):e0235154. DOI: 10.1371/journal.pone.0235154
33. Voss A, Bogdanski M, Langohr B, Albrecht R, Sandbothe M. Mindfulness-based student training leads to a reduction in physiological evaluated stress. Front Psychol. [Internet]. 2020 [cited in 15 June 2022]; 11:645. DOI: 10.3389/fpsyg.2020.00645
34. Rezaei B, Falahati J, Beheshtizadeh R. Stress, stressors and related factors in clinical learning of midwifery students in Iran: a cross sectional study. BMC Med Educ. [Internet]. 2020 [cited in 15 June 2022]; 20(1):78. DOI: 10.1186/s12909-020-1970-7
35. Puspitasari IM, Garnisa IT, Sinuraya RK, Witriani W. Perceptions, knowledge, and attitude toward mental health disorders and their treatment among students in an Indonesian University. Psychol Res Behav Manag. [Internet]. 2020 [cited in 15 June 2022]; 13:845-54. DOI: 10.2147/PRBM.S274337
36. Galante J, Dufour G, Benton A, Howarth E, Vainre M, Croudace TJ, et al. Protocol for the Mindful Student Study: a randomised controlled trial of the provision of a mindfulness intervention to support university students' well-being and resilience to stress. BMJ Open [Internet]. 2016 [cited in 15 June 2022]; 6(11):e012300. DOI: 10.1136/bmjopen-2016-012300
37. Freire MA, Figueiredo VLM, Gomide A, Jansen K, Silva RA, Magalhães PVS, et al. Escala Hamilton: estudo das características psicométricas em uma amostra do sul do Brasil. J Bras Psiquiatr. [Internet]. 2014 [cited in 12 Apr 2020]; 63(4):281-9. DOI: 10.1590/0047-2085000000036
38. Gouveia VV, Lima TJS, Gouveia RSV, Freires LA, Barbosa LHGM. Questionário de Saúde Geral (QSG-12): o efeito de itens negativos em sua estrutura fatorial. Cad Saude Pública [Internet]. 2012 [cited in 12 June 2020]; 28(2):375-84. DOI: 10.1590/S0102-311X2012000200016
39. Faro A. Análise fatorial confirmatória e normatização da Hospital Anxiety and Depression Scale (HADS). Psicol Teor Pesqui. [Internet]. 2015 jul/set[cited in 8 July 2020]; 31(3):349-53. DOI: 10.1590/0102-37722015032072349353

40. Carlotto MS, Camara SG. Análise fatorial do Maslach Burnout Inventory (MBI) em uma amostra de professores de instituições. Psicol Estud. [Internet]. 2004 [cited in 08 July 2020]; 9(3):499-505. DOI: 10.1590/S1413-73722004000300018
41. Kessler RC, Andrews G, Colpe LJ, Hiripi E, Mroczek DK, Normand SL, et al. Short screening scales to monitor population prevalences and trends in non-specific psychological distress. Psychol Med. [Internet]. 2002 [cited in 15 June 2022]; 32(6):959-76. DOI: 10.1017/s0033291702006074

Associated Publisher: Vania Del Arco Paschoal.

Conflict of Interests: the authors declared that there is no conflict of interest.

Financing: Fapesp Process 10784-2/2020.

CONTRIBUTIONS
Tatiane Carolina Martins Machado Rodrigues and **Guilherme Correa Barbosa** contributed to the design, collection and analysis of data, and writing. **Vera Lúcia Pamplona Tonete** collaborated in the design, data analysis, writing and review.

How to cite this article (Vancouver)
Rodrigues TCMM, Barbosa GC, Tonete VLP. Coping with the psychological distress of students in the university context: an integrative review. Rev Fam, Ciclos Vida Saúde Contexto Soc. [Internet]. 2022 [cited in *insert day, month and year of access*]; 10(3):590-607. Available from: *insert access link*. DOI: *insert DOI link*.

How to cite this article (ABNT)
RODRIGUES, T. C. M. M.; BARBOSA, G. C.; TONETE, V. L. P. Coping with the psychological distress of students in the university context: an integrative review. **Rev Fam, Ciclos Vida Saúde Contexto Soc.**, Uberaba, MG, v. 10, n. 3, p. 590-607, 2022. DOI: *insert DOI link*. Available from: *insert access link*. Access in: *insert day, month and year of access*.

How to cite this article (APA)
Rodrigues, T.C.M.M., Barbosa, G.C., & Tonete, V.L.P. (2022). Coping with the psychological distress of students in the university context: an integrative review. *Rev Fam, Ciclos Vida Saúde Contexto Soc.*, *10*(3), 590-607. Retrieved in *insert day, month and year of access* from *insert access link*. DOI: *insert DOI link*.