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Coping and well-being in university students: sex and cultural differences

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For the psychological and personal well-being of university students, it is considered essential to study the coping strategies they use when faced with conflictive situations in the academic context and the resources that the institution offers to help them overcome these challenges. The objective of this work is to evaluate the effect of sex and culture on the different coping strategies that higher education students use in the face of the difficulties they face in the academic environment. For this purpose, the questionnaire “Coping Strategies Inventory (CSI)” was applied to a sample of 1,281 university students. The results indicate that there are significant differences in the problem-solving strategies used depending on gender and culture, finding interaction between these variables, with European women being the ones who use active strategies the most. On the contrary, men of Berber origin, are the ones who use less coping strategies, both active (emotional expression and social support) and passive (desiderative thinking), to resolve conflicts.

KEYWORDS

well-being, coping strategies, university students, sex, culture

Introduction

The coping strategies that human beings habitually employ in the management of conflict situations are key factors in order to be able to perform adequately in different contexts and will determine the way we relate to others and the changes we wish to achieve in order to improve our psychological and emotional well-being. Each person faces similar conflicts in a different way and they depend more on the emotions generated by the interpretation made by each subject, than on the scenario itself. In this sense, it was key the Transactional Theory of Stress and Cognitive Processes of [Lazarus and Folkman \(1986\)](#), which highlights the cognitive evaluation that each person makes of a supposedly stressful situation; while for some, these demands are perceived as threats, others see them as opportunities for conflict transformation, which helps them to overcome their objectives ([López-Paz, 2021](#)).

University students are, as a general rule, a vulnerable group, since they face numerous uncertainties related to various issues, such as academic success, future employment, mental health, social and personal relationships ([Brown et al., 2024](#)), and the way they manage these challenges can generate anxiety, stress or any other consequence that harms their well-being ([Adasi et al., 2020](#); [Castro-Sánchez et al., 2022](#); [Rose et al., 2021](#)). Addressing the coping strategies they use in these situations is to understand that this is one of the determining factors for students to be able to perform well in the academic context. The next step is for the university institution, due to the diversity of the student body, to be able to adapt and

update all its human and organizational resources to facilitate mediation in the effective management of these conflicts (Alcover, 2023; Dayagbil, 2023; Gonzalo, 2022).

In the field of higher education, the study of the different coping strategies of students in conflict is often neglected, and the literature on this issue is scarce, since usually, in universities, the academic results of students tend to be prioritized over their general well-being (Lubis et al., 2024; Madhuri and Senel, 2021).

Studies on this topic associate coping styles with coping strategies, which, although they do not have the same meaning, complement each other. In general terms, historical and recent works on these two concepts (Gustems et al., 2020; Lazarus and Folkman, 1986; Morales, 2020; Popescu, 2023; Savage and Woloshyn, 2022; Sosa and Zubieta, 2010; Yavuz, 2020), allow defining coping styles as the more or less stable, consistent and habitual ways that an individual presents to face the stress produced by a scenario he/she considers difficult. It corresponds to a personality characteristic, since it defines the different reactions of the subject to these situations, and the use of one style or another is what will determine individual preferences in the use of different coping strategies. This last notion, inseparable from the previous one, is usually defined as the specific cognitive or behavioral actions (thoughts, sensations and actions) that a subject implements to face stressful or disturbing realities. Its denomination is very varied (methods, techniques) and, therefore, its conceptual limitation is less precise than styles.

Some research (Gustems et al., 2020; Morales, 2020; Savage and Woloshyn, 2022; Popescu, 2023, among others) shows that there are different strategies associated with general coping styles, organized as shown in Table 1.

On the other hand, different research (Halama and Bakosová, 2009; Morales and Trianes, 2010) indicates that individuals who habitually use problem-focused styles adapt better to situations and have a more effective functioning, so they can achieve greater success in the tasks they carry out. However, emotion-directed and avoidance styles are related to an increase in emotional and behavioral problems.

Although it is clear that the response to conflicts depends on each person and on each context and situation, there are some

variables that seem to be totally related to the use of different types of coping and to the difference in their impact, depending on the diversity of the group (Lubis et al., 2024). Authors such as Pekrun (2017) and Nieto et al. (2024), define these variables as *distal determinants*, being factors that can modify emotional competences, when managing situations that they consider conflictive.

With reference to the gender variable, numerous studies establish differences in the use of these coping styles and strategies between men and women in the resolution of a conflict, although there is no unanimous agreement on this issue. Thus, Adasi et al. (2020); Luna and Laca (2014) or Lubis et al. (2024), indicate that women tend to use more emotion-focused strategies, which Frydenberg and Lewis (1996), call “non-productive” or “non-coping”; on the contrary, men tend to use those focused on the solution of the problem and the situation, facing the conflict (Reyes et al., 2017). However, Viñas et al. (2015) and Yelpaze (2020), highlight that males tend to ignore problems or keep them to themselves, employing passive coping styles. In this situation, authors such as Adasi et al. (2020) and Avalos and Trujillo (2021) highlight that the results that differentiate the use of coping between the sexes are not consistent, especially in adolescence.

- As for the variable related to belonging to culturally diverse groups, studies show that the subjective evaluation that each subject makes of a situation will be conditioned, to a large extent, by the values and normative structure transmitted by each culture (Leiva, 2007). This factor, the cultural, as well as the biological, social and psychological, directly influences the different ways of coping with a stressful situation, since when contact is made between people from different cultures, in the same context and space, numerous psychosocial factors come into play and determine the responses to difficulties and the strategies and mechanisms for coping with them (Alemany-Arrebola et al., 2024; Sosa and Zubieta, 2010). Thus, the greater the cultural contrasts and the greater the influence of the different stereotypes on this issue, the more difficult the adaptation and the higher the level of stress, with these problems decreasing as cultural similarity increases.
- For all of the above, it is considered essential to study the factors that provoke these situations and how they are resolved, in order to improve the well-being of the student in the academic context. Therefore, the aim of this research is to analyze the coping strategies that university students use in a conflict according to the gender and cultural background variables (the latter being measured through the religion professed by university students).

TABLE 1 Association between coping styles and coping strategies.

Style	Type of coping	Strategy
Problem focused	Active coping	Logical analysis of the scenario Troubleshooting Action strategies Suppression of competitive activities Striving for success or focusing on the positive
Focused on emotion	Active coping	Social emotional support Acceptance of responsibility Search for moral understanding Empathy
Avoidance focused	Passive coping	Behavioral disengagement The problem is ignored Resignation Real unproductive thoughts

Methods

Design

An empirical-analytical, *Ex Post Facto* (Casari, 2022), causal-comparative research was used, with a cross-sectional design for data collection.

Participants

This research is carried out at the University of Granada. For the choice of the sample, a non-probabilistic sampling was used, as it seemed convenient since the subjects who collaborated in this work were chosen directly and intentionally (Sharma, 2019), due to their accessibility and availability to collaborate. The participating sample consisted of 1,281 subjects, with a mean age of 21.18, the minimum age being 18 and the maximum 51. To detail the sample, the following attributive variables were taken into account: grade, sex and religion (Table 2). The data, in relation to sex, indicate that women are the majority group, reflecting the feminization of the educational grades.

TABLE 2 Sample distribution (N = 1,281).

By grade	Children's education	Primary education	Social ed.	Pedagogy	
	490 (38.3%)	416 (32.5%)	234 (18.3%)	140 (10.9%)	
By gender	1,015 women (79.6%)		260 men (20.4%)		
By religion	Christian 738 (58.2%)	Islamic 129 (10.2%)	None 288 (30.6%)	Bean 4 (0.3%)	Another 8 (0.6%)

If we detail the sample according to the variables under study, sex and religion, the data are as follows (Table 3).

TABLE 3 Description of the participants according to the variables sex and religion.

Sex	Religion N (%)				
	Christian	Islamic	Bean	Agnostic/ Atheist	Other
Man	131 (10.38)	23 (1.82)	0	100(0.92)	2 (0.15)
Woman	603 (47.78)	106 (8.39)	4 (0.31)	287 (22.74)	6 (0.47)
Total	734	129	4	387	8

Instrument

The questionnaire applied is the Spanish adaptation of the Coping Strategies Inventory (CSI), developed by Tobin et al. (1989) and adapted by Cano et al. (2007). This adapted instrument consists of 40 items, with eight factors that explain 61% of the total variance. In addition, the reliability of the factors ranges from 0.718 to 0.831. The scoring of each of the items is through a Likert-type response, from 0 to 4, being 0, not at all; 1, a little; 2, quite a lot; 3, a lot; and 4, completely. Thus, the Coping Inventory scale shows a very satisfactory reliability ($\alpha=0.914$), with the internal consistency indices of the subscales being the following: Problem Solving $\alpha=0.780$; Self-Criticism $\alpha=0.831$; Emotional Expression $\alpha=0.828$; Desiderative Thinking $\alpha=0.813$; Social Support $\alpha=0.807$; Cognitive Restructuring $\alpha=0.775$; Problem Avoidance $\alpha=0.718$ and Social Withdrawal $\alpha=0.797$.

The meanings of the Coping Inventory factors are explained through the two fundamental styles: active and passive and the eight strategies that can be implemented in a conflict situation (Table 4).

TABLE 4 Coping styles and coping strategies from the CSI inventory.

Coping styles	Strategies	Definition of strategies	Items
Coping active	Troubleshooting (REP)	Aimed at eliminating stress and modifying the situation that produces it.	1, 9, 17, 25, 33
	Cognitive Restructuring (REC)	Modification of the meaning of the stressful situation	6, 14, 22, 30, 38
	Social Support (APS)	Search for emotional support	5, 13, 21, 29, 37
	Emotional Expression (EEM)	Release of emotions that occur in the process of stress.	3, 11, 19, 27, 35
Coping passive	Problem Avoidance (EVP)	Denial and avoidance of thoughts or actions related to the stressful event	7, 15, 23, 31, 39
	Desiderative Thinking (PSD)	Desire that reality was not stressful	4, 12, 20, 28, 36
	Social Withdrawal (RES)	Withdrawal of friends, family and significant others associated with the emotional reaction in the stressful process	8, 16, 24, 32, 40
	Self-criticism (AUC)	Self-blame and self-criticism for the occurrence of the stressful situation and inadequate management.	2,10, 18, 26, 34

Procedure

Once the final instrument had been prepared, the fieldwork was carried out. This required ethical approval in accordance with local legislation and institutional requirements. Therefore, the faculty teaching the basic subjects in the undergraduate programs were informed of the objectives of the research and their collaboration was requested in the application of the questionnaire during class hours. In addition, the voluntary collaboration of the students was requested by signing an informed consent form before starting the questionnaire. To guarantee the treatment of the data, the norms of the Declaration of Helsinki were followed and anonymity was guaranteed.

The average duration of the test was approximately 30 min. The persons responsible for the application of the instrument were the persons conducting the research.

Statistical analysis

Once the data obtained had been extracted and computerized, in order to respond to the research objective, the appropriate statistical analyses were carried out using the SPSS program

version 23.0. For this purpose, descriptive (means, standard deviation, skewness) and inferential (Student's *t*, one-factor ANOVA and multivariate analysis of Variance) analyses were performed, since large samples ($N=1,281$) allow the use of parametric statistics even when the data are not normally distributed (Ghasemi and Zahediasl, 2012; Pedrosa et al., 2015; Schmidt and Finan, 2018; Tsagris and Pandis, 2021). Furthermore, effect size was analyzed using Cohen's *d*. Finally, statistical significance was set at $p < 0.05$.

Results

First, the descriptive statistics of the Coping Strategies Inventory were analyzed; the data are shown in Table 5.

Next, the coping strategies were analyzed according to the sex variable (Table 6), the results indicate that there are significant differences, with women using Emotional Expression (EEM), Desiderative Thinking (PSD) and Social Support (APS) strategies, the effect size being small in all cases. On the contrary, men are the ones who use more Self-Criticism (AUC), Problem Avoidance (EVP) and Social Withdrawal (RES), being the effect size medium.

As for the variable religion professed by the university students, only the majority groups (Christian, Islamic and those responding no religion) were taken into account for the inferential analyses. The results indicate that there are only significant differences in the

strategies of Social Support (APS) ($F=2.819$; $p=0.024$, $\eta^2=0.09$, small effect size) and Problem Solving (REP) ($F=4.454$; $p=0.001$; $\eta^2=0.014$, small effect size), being in both cases the students of Western origin, with Christian religion, the ones who use them the most. On the contrary, it is the student of Islamic religion who most uses the Problem Avoidance (PAD) ($F=2.456$; $p=0.044$, $\eta^2=0.04$, small effect size) and Social Withdrawal (SR) strategies ($F=2.456$; $p=0.044$, $\eta^2=0.014$, small effect size). Thus, the results indicate that university students of Catholic religion and of Western origin use more active strategies than students of Islamic religion, of Berber origin, who use more passive strategies (Berber, Denomination used by different researchers to refer to the cultural group of Muslim origin residing in Melilla (Ministry of Education, 2010)).

Subsequently, a MANCOVA was performed to find out the influence of sex and religion on coping strategies (Table 7), the results indicate that there are significant differences ($F=3.066$; $p=0.026$; $\eta^2=0.015$). Thus, if the data are analyzed according to the subscales, the results indicate that there are differences only in the strategies: Problem Avoidance ($F=3.467$; $p=0.016$; $\eta^2=0.015$; $\eta^2=0.037$) and Social Withdrawal ($F=5.356$; $p=0.026$; $\eta^2=0.015$ $\eta^2=0.080$), both of which are considered passive styles in conflict resolution. Moreover, in relation to the former, it is men of Christian religion who obtain the highest scores versus women who profess no religion who obtain the lowest scores. As for the Social Withdrawal strategy, it is women who do not profess any religion who obtain the lowest means compared to Christian men. It can be said that Christian men use more passive strategies than agnostic/atheist women.

TABLE 5 Descriptive data of the coping strategies inventory questionnaire.

Item	Media	DS	Asymmetry	Item	Media	DS	Asymmetry
Item 1	3.47	1.16	-0.319	Item 21	3.39	1.20	-0.357
Item 2	1.92	0.98	0.936	Item 22	2.94	1.14	-0.013
Item 3	2.73	1.17	0.216	Item 23	2.74	1.15	0.254
Item 4	3.33	1.38	-.267	Item 24	2.09	1.18	0.855
Item 5	3.56	1.17	-0.525	Item 25	3.16	1.12	-0.117
Item 6	3.16	1.23	-0.186	Item 26	2.16	1.14	0.692
Item 7	2.69	1.20	0.353	Item 27	2.89	1.12	0.090
Item 8	2.07	1.22	0.905	Item 28	3.17	1.24	-0.100
Item 9	3.50	1.10	-0.389	Item 29	3.39	1.15	-0.340
Item 10	2.22	1.14	0.604	Item 30	3.01	1.13	-0.021
Item 11	3.15	1.21	-0.062	Item 31	2.32	1.23	0.613
Item 12	3.33	1.29	-0.221	Item 32	2.17	1.21	0.724
Item 13	3.77	1.13	-0.710	Item 33	3.36	1.19	-0.267
Item 14	2.87	1.17	0.047	Item 34	2.15	1.21	0.713
Item 15	2.62	1.29	0.345	Item 35	2.45	1.23	0.447
Item 16	1.85	1.14	1.217	Item 36	2.95	1.15	0.062
Item 17	3.63	1.17	-0.553	Item 37	3.41	1.25	-0.349
Item 18	2.17	1.18	0.730	Item 38	3.21	1.15	-0.178
Item 19	2.86	1.19	0.111	Item 39	2.25	1.21	0.620
Item 20	3.29	1.34	-0.192	Item 40	2.18	1.24	0.773

TABLE 6 Coping strategies as a function of the gender variable.

Subscales	Sex	N	Media	DT	T	p	d _{COHEN}
Troubleshooting	Man	235	16.84	4.30	-1.277	n.s.	-
	Woman	889	17.24	4.19			
Self-criticism	Man	240	11.87	4.82	4.698	0.000***	0.30
	Woman	889	10.26	4.18			
Emotional expression	Man	237	13.30	4.74	-2.987	0.003**	0.17
	Woman	894	14.31	4.58			
Desiderative thinking	Man	237	15.50	4.70	-2.001	0.046	0.17
	Woman	891	16.21	4.92			
Social support	Man	228	16.50	4.34	-4.159	0.000***	0.25
	Woman	864	17.87	4.43			
Cognitive restructuring	Man	237	14.99	4.19	-0.908	n.s.	-
	Woman	895	15.27	4.26			
Problem avoidance	Man	241	13.68	4.26	4.313	0.000***	0.38
	Woman	903	12.37	4.14			
Social withdrawal	Man	237	11.98	4.79	6.462	0.000***	0.45
	Woman	883	9.90	4.27			
Coping inventory	Man	198	113.90	24.44	0.339	n.s.	-
	Woman	721	113.28	22.61			

*p<0.05, **p<0.01, ***p<0.001.

TABLE 7 Strategies used by university students according to the interaction between sex and religion variables.

Strategy	N and Averages (DT)		F	p
	Man	Female		
	N Mean (SD)	N Mean (SD)		
Problem solving (PR)	Christian = 99 16.62 (4.09)	Christian = 432 17.29 (4.25)	0.372	0.773
	Islamic = 14 16.78 (5.57)	Islamic = 60 16.43 (4.08)		
	None = 80 17.33 (4.47)	None = 213 17.83 (5.13)		
Self-criticism (AC)	Christian = 99 12.49 (4.80)	Christian = 434 10.15 (4.15)	2.598	0.051
	Islamic = 14 11.00 (5.08)	Islamic = 60 11.38 (4.70)		
	None = 80 10.92 (4.78)	None = 213 9.54 (4.16)		
Emotional expression (EXE)	Christian = 99 13.10 (4.85)	Christian = 434 14.43 (4.68)	1.574	0.194
	Islamic = 14 11.71 (4.19)	Islamic = 60 14.30 (4.71)		
	None = 80 13.47 (4.91)	None = 213 13.90 (4.82)		
Desiderative thinking (PSD)	Christian = 99 16.20 (4.44)	Christian = 434 16.52 (5.07)	2.252	0.081
	Islamic = 14 13.28 (4.58)	Islamic = 60 16.93 (4.56)		
	None = 80 14.93 (5.07)	None = 213 15.89 (5.17)		
Social support (APS)	Christian = 99 16.59 (4.59)	Christian = 434 18.12 (4.54)	0.689	0.559
	Islamic = 14 16.14 (5.64)	Islamic = 60 16.36 (4.53)		
	None = 80 16.50 (4.20)	None = 213 18.30 (4.40)		
Cognitive restructuring (CRR)	Christian = 99 14.86 (4.29)	Christian = 434 15.60 (4.35)	2.525	0.056
	Islamic = 14 13.85 (5.65)	Islamic = 60 14.86 (4.18)		
	None = 80 14.96 (4.14)	None = 213 14.92 (4.59)		
Problem avoidance (EVP)	Christian = 99 14.36 (4.34)	Christian = 434 12.37 (4.00)	3.467	0.016*
	Islamic = 14 12.42 (4.12)	Islamic = 60 13.31 (4.64)		
	None = 80 12.81 (4.08)	None = 213 11.65 (4.45)		
Social withdrawal (RES)	Christian = 99 13.10 (4.72)	Christian = 434 9.52 (4.05)	5.356	0.001***
	Islamic = 14 12.21 (5.92)	Islamic = 60 11.70 (4.56)		
	None = 80 10.36 (4.37)	None = 213 9.18 (4.25)		
Inventory total	Christian = 99 117.35 (23.25)	Christian = 434 114.07 (23.36)	3.066	0.026*
	Islamic = 14 107.42 (28.00)	Islamic = 60 114.90 (20.11)		
	None = 80 111.36 (24.03)	None = 213 111.24 (21.67)		

*p<0.05, **p<0.01, ***p<0.001.

Discussion

The aim of this research has been to know the coping strategies used by university students when faced with a conflict that may be a source of personal discomfort. The results indicate that there are differences in the problem-solving strategies used by university students, depending on the different variables studied. Thus, according to the data, women, when faced with conflicts, tend to express their emotions and release them in order to let off steam, set thoughts and desires in motion not to find themselves in that situation and seek the help of others to get out of the problem. Their most common strategies are those of emotional expression and social support, which correspond to the so-called active and more emotion-focused ones, coinciding with the work of [Adasi et al. \(2020\)](#), [Luna and Laca \(2014\)](#) and [Lubis et al. \(2024\)](#). However, the occurrence of desiderative thoughts in the face of a problematic situation, belonging to the passive and avoidance-focused ones, is another of the most employed strategies among the participating women. In either of the two classifications of responses to the resolution of a conflict, women tend to use strategies focused on emotion and avoidance, so they would have more difficulties in adapting to different situations and a lower rate of success in resolving the issue, as well as reflecting the presence of certain emotional problems and, therefore, this would harm their psychological well-being in the academic context.

According to this study, men tend to blame themselves for difficulties, reject thoughts about these situations or downplay their importance, and usually avoid sharing them with others, ignoring stressful situations. Self-criticism, avoidance and social withdrawal correspond to passive and avoidance-focused coping strategies. These results differ from those obtained by [Luna and Laca \(2014\)](#), in which they highlight that males tend to act actively and directly in the solution of problems, or the work of [Cabras and Mondo \(2018\)](#), who indicate that males tend to report the use of avoidance strategies in a higher percentage than females. In this line, [Alemany-Arrebola et al. \(2024\)](#) conclude that women and men face conflicts differently, thus girls use social support-seeking strategies and boys use conflict avoidance. Although, as indicated by [Adasi et al. \(2020\)](#) and [Avalos and Trujillo \(2021\)](#), the results that differentiate the use of coping between the sexes are not consistent, especially at the age of adolescence, so further research on this variable is needed, especially in multicultural contexts.

Thus, in this research we observed differences in coping strategies according to gender, which may be due to the traditional socialization patterns between men and women, the so-called gender socialization ([Alemany-Arrebola et al., 2019](#)), by which culture is divided into a feminine and a masculine one, which are recognized and assumed by people within a sociocultural context, being the main agents of transmission of these roles the family and school, although not the only ones. This process of transmission of cultural patterns associated with gender influences the way of coping with difficulties, with women using more emotion-focused coping strategies. These differences between men and women are supported by the different gender roles, since while men are educated in more aggressive and competitive attitudes, women are socialized towards a greater rejection of conflict and a greater bonding with others.

As for the culture variable, the data indicate that it is the students of European origin who most frequently use the strategy

of seeking support in the face of a conflict (active strategy, centered on emotion); on the contrary, the habitual strategies of the group of Berber origin are, for the most part, avoiding problems and isolating themselves from others (passive, centered on avoidance). Neither group reflects the habitual use of effective skills to resolve difficulties, although what is most notable is the use that each group makes of the people around them to resolve the situation; those of European origin resort to the support of others (active) and those of Berber origin withdraw into themselves (passive), avoiding coping with the situation. This may be due to [Alemany-Arrebola et al. \(2024\)](#), [Leiva \(2007\)](#) and [Sosa and Zubieta \(2010\)](#), who note that, in multicultural contexts, the evaluation, attitude and different forms of communication and interaction that each subject uses in different situations is conditioned by the different patterns, the values transmitted by each culture and their own life experiences.

Finally, when analyzing the gender and culture variables together, we found that women of European origin use more frequently the search for resolution of their problems (active), the search for social support (active) and the expression of their emotions to others (active), in contrast to women of Berber origin, who respond more frequently with desiderative thoughts (passive). Men of European origin, on the other hand, use more passive strategies: self-criticism and problem avoidance. These results are in line with [Viñas et al. \(2015\)](#) and [Yelpaze \(2020\)](#), who conclude that men tend to ignore or reserve problems for themselves. Continuing with this idea, it is men of Berber background who score lower in both passive strategies (self-criticism and desiderative thinking) and active strategies (emotional expression and social support), so they do not implement strategies when faced with conflict resolution, neither active nor passive. Therefore, it can be observed that the gender differences found are accentuated by the culture factor; these results coincide with the research of [Sánchez and Mesa \(2002\)](#) who conclude that there are differences between the roles of women and men depending on the cultural group of origin. Although the group of Berber origin considers that the situation of women has changed a lot, the situation of differentiation between sexes remains.

To conclude:

- There are differences in the use of coping strategies according to gender, with women using both active strategies (emotional expression and search for social support), focused on emotions, and passive strategies, with the use of desiderative thinking, which reflects the desire to change reality. In contrast, men use more passive strategies, both self-criticism and problem avoidance.
- The cultural origin variable influences the strategies used in the face of conflict. Thus, students of European origin use the active strategy of social support, which involves seeking emotional support in the face of a problem. In contrast, students of Berber origin use more passive strategies, problem avoidance and social withdrawal, in both cases including both the denial of thoughts or actions related to the stressful event and the withdrawal of friends, family and significant people associated with the conflict are the most frequently used.
- There is an interaction between the sex and culture variables, with European women using more active strategies, including

problem solving, emotional expression and social support, while Berber university women use more passive strategies, desiderative thinking. In contrast, European men use the passive strategy, problem avoidance. Berber men are the least likely to use active and passive strategies.

Finally, one of the limitations found in this study is the use of an empirical-analytical methodology, with the application of a scale to measure coping strategies and styles. This research should continue to deepen in this subject by working, in addition, with a qualitative methodology, collecting information with a focus group and in-depth interviews. With this mixed methodology, the coping styles and strategies of university students and their relationship with the emotional well-being/discomfort generated by conflictive situations will be studied in depth. In addition, it is necessary to include other variables that are necessary to work on this topic from a more holistic viewpoint, such as analyzing academic performance, emotional intelligence competencies, student resilience, anxiety in stressful situations, social skills, satisfaction of university students with the degree, among others. All these variables will provide a wide range of information that will help to analyze in more detail what external and internal factors explain the use of different coping strategies and styles and will help to implement, from the university counseling office or from the university mediation services, support and advice to students.

Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

Ethics statement

Ethical approval was not required for the studies involving humans because the participants in the study are of legal age and gave their informed consent prior to the application of the test. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

References

- Adasi, G., Amposah, K., Mohammed, S., Yeboah, R., and Mintah, P. (2020). Gender differences in stressors and coping strategies among teacher education students at University of Ghana. *J. Educ. Learn.* 9:123. doi: 10.5539/jel.v9n2p123
- Alcover, C. M. (2023). Mediation in the framework of law 3/2022 on university coexistence. *Rueda: Universidad, Ética y Derechos* 8, 75–88. Available at: <https://revistas.uca.es/index.php/Rueda>
- Aleman-Arrebola, I., Gallardo-Vigil, M. Á., Ortiz-Gómez, M. M., and Vilà-Banos, R. (2024). Intercultural and interreligious dialogue competences in adolescents in Barcelona and Melilla (Spain). *Religions* 15:211. doi: 10.3390/rel15020211
- Aleman-Arrebola, I., González-Gijón, G., Ruíz, F., and Ortiz, M. (2019). Adolescents' perception of parental practices from the gender perspective. *Pedagog. Soc. Rev. Inte.* 33, 31–43. doi: 10.7179/PSRI_2019.33.09
- Avalos, M. L., and Trujillo, F. (2021). Variables involved with academic stress and coping in college students during COVID-19 confinement. *Psicol. Iberoam.* 29:e293331. doi: 10.48102/pi.v29i3.331
- Brown, H. E., McKibbin, M., and Todd, A. (2024). The COVID-19 pandemic, undergraduate Students' well-being and their coping strategies: a scoping review. *Int. Educ. Stud.* 17, 25–9039. doi: 10.5539/ies.v17n1p25
- Cabras, C., and Mondo, M. (2018). Coping strategies, optimism, and life satisfaction among first-year university students in Italy: gender and age differences. *High Educ.* 75, 643–654. doi: 10.1007/s10734-017-0161-x
- Cano, F. J., Rodríguez, L., and García, J. (2007). Spanish adaptation of the coping strategies inventory. *Actas Esp. Psiquiatr.* 35, 29–39.
- Casari, L. (2022). Quantitative research designs in psychology: an introduction. *Res. Psychol.* 25, 17–26. Available at: <http://hdl.handle.net/11336/203526>
- Castro-Sánchez, M., Ramiro-Sánchez, T., García-Mármol, E., and Chacón-Cuberos, R. (2022). The association of trait emotional intelligence with the levels of anxiety, stress and physical activity engagement of adolescents. *Rev. Latinoam. Psicol.* 54, 130–139. doi: 10.14349/rlp.2022.v54
- Dayagbil, F. T. (2023). Anticipation, coping and adaptation practices for teaching and learning continuity of higher education institutions. *Int. J. Educ. Pract.* 11, 106–119. doi: 10.18488/61.v11i1.3267
- Frydenberg, E., and Lewis, R. (1996). The adolescent coping with scale: multiple forms and applications of a self-report inventory in a counselling and research context. *Eur. J. Psychol. Assess.* 12, 216–227.

Author contributions

GR-R: Writing – original draft, Writing – review & editing. IA-A: Writing – original draft, Writing – review & editing. ÁM-E: Writing – original draft, Writing – review & editing.

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Generative AI statement

The author(s) declare that no Generative AI was used in the creation of this manuscript.

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- Ghasemi, A., and Zahediasl, S. (2012). Normality tests for statistical analysis: a guide for non-statisticians. *Int. J. Endocrinol. Metab.* 10, 486–489. doi: 10.5812/ijem.3505
- Gonzalo, M. (2022). Mediation as a tool for the sustainable development goals in the nascent law of university coexistence: UNIMEDIA proposal. *J. Educ. Law* 1, 281–306. doi: 10.1344/REYD2021.1EXT.37705
- Gustems, J., Calderón, C., Calderón, D., and Martín, C. (2020). Academic progress, coping strategies and psychological distress among teacher education students. *Int. J. Educ. Psychol.* 9, 290–312. doi: 10.17583/ijep.2020.4905
- Halama, P., and Bakosová, K. (2009). Meaning in life as a moderator of the relationship between perceived stress and coping. *Stud. Psychol.* 7, 143–148.
- Lazarus, R. S., and Folkman, S. (1986). *Stress and cognitive processes*. Madrid: Martínez Roca.
- Leiva, J. L. (2007). Conflict management and regulation strategies in educational contexts of intercultural education. *Rev. Iberoam. Educ.* 43, 1–8. doi: 10.35362/rie4332325
- López-Paz, L. (2021). The culture of peace and its contribution to international conflict resolution. *J. Peace Conflict* 14, 250–266. doi: 10.30827/revpaz.v14i2.20997
- Lubis, Z., Dalimunthe, M. B., Lubis, W., Aditia, R., and Dalimunthe, R. Z. (2024). Examining coping strategies and academic resilience among Indonesian students: the role of gender and domicile. *Pegem J. Educ. Instr.* 14, 183–191. doi: 10.47750/pegegog.14.03.17
- Luna, A. C., and Laca, F. A. (2014). Message styles in conflict management in Mexican adolescents and youth. *Boletín Psicol.* 110, 37–51.
- Madhuri, D., and Senel, P. (2021). Social anxiety, depression, coping self efficacy and coping strategies among college students. *Psycho-Educ. Res. Rev.* 10, 411–425. doi: 10.52963/PERR_Biruni_V10.N3.26
- Ministry of Education. (2010). *Early school dropout in the cities of Ceuta and Melilla*. Spain: Ministry of Education.
- Morales, F. M. (2020). Coping strategies, empathy and prosocial tendency in university students. *Eur. J. Educ. Psychol.* 13, 187–200. doi: 10.30552/ejep.v13i2.360
- Morales, M., and Trianes, M. (2010). Coping and maladaptive coping strategies in children and adolescents. *Eur. J. Educ. Psychol.* 3, 275–286. doi: 10.30552/ejep.v3i2.42
- Nieto, A., Sánchez Rosas, J., and Gómez-Íñiguez, C. (2024). Identifying the role of emotional intelligence in achievement emotions and their effects on deep learning strategies in college students. *J. Psychodidact.* 29, 47–56. doi: 10.1016/j.psicod.2023.11.004
- Pedrosa, I., Juarros-Basterretxea, J., Robles-Fernández, A., Basteiro, J., and García-Cueto, E. (2015). Goodness-of-fit tests in symmetric distributions, which statistic to use? *Univ. Psychol.* 14, 245–254. doi: 10.11114/javeriana.upsy13-5.pbad
- Pekrun, R. (2017). Emotion and achievement during adolescence. *Child Dev. Perspect.* 11, 215–221. doi: 10.1111/cdep.12237
- Popescu, M. A. (2023). Well-being particularities and coping mechanisms among elderly population. *J. Educ. Sci.* 48, 169–178. doi: 10.35923/JES.2023.2.12
- Reyes, V., Reséndiz, A., Alcázar, R., and Reidl, L. (2017). Coping strategies used by adolescents in the face of fear-provoking situations. *Psicogente* 20, 240–255. doi: 10.17081/psico.20.38.2544
- Rose, P., Mather, P., Suniti, C., and James, J. (2021). University student well-being during COVID-19: the role of psychological capital and coping strategies. *Prof. Counselor* 11, 46–60. doi: 10.15241/prp.11.1.46
- Sánchez, S., and Mesa, M. C. (2002). Los relatos de convivencia como recurso didáctico. Málaga: Aljibe.
- Savage, M., and Woloshyn, V. (2022). Coping is crucial: exploring relations between K-12 educators and staff coping strategies, perceived stress and psychological wellbeing. *Int. J. Emot. Educ.* 14, 3–18. doi: 10.56300/QBVZ8040
- Schmidt, A., and Finan, C. (2018). Linear regression and the normality assumption. *J. Clin. Epidemiol.* 98, 146–151. doi: 10.1016/j.jclinepi.2017.12.006
- Sharma, S. (2019). *Experimental and ex post facto designs*. Ph.D. Thesis, Horizons University. Available at: https://www.researchgate.net/publication/333220493_Experimental_and_Ex_Post_Facto_Designs (Accessed August 18, 2024).
- Sosa, F., and Zubieta, E. (2010). Coping and acculturation in university students (online). *Rev. Psicol.* 6, 65–84.
- Tobin, D. L., Holroyd, K. A., Reynolds, R. V., and Wigal, J. K. (1989). The hierarchical factor structure of coping strategies inventory. *Cogn. Ther. Res.* 13, 343–361. doi: 10.1007/BF01173478
- Tsagris, M., and Pandis, N. (2021). Normality test: is it really necessary? *Am. J. Orthod. Dentofacial Orthop.* 159, 548–549. doi: 10.1016/j.ajodo.2021.01.003
- Viñas, F., González, M., García, Y., Malo, S., and Casas, F. (2015). Coping styles and strategies and their relationship with personal well-being in a sample of adolescents. *Ann. Psychol.* 31, 226–233. doi: 10.6018/analesps.31.1.163681
- Yavuz, B. (2020). Stress coping strategies of university students. *Cypriot J. Educ. Sci.* 15, 1320–1336. doi: 10.18844/cjes.v15i5.5502
- Yelpaze, I. (2020). The prediction of personality, culture and coping strategies on university students psychological help seeking attitudes. *Turk. J. Educ.* 9, 134–153. doi: 10.19128/turje.611402