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University Students' Coping Profiles and their Relationship with the Intention to Drop Out

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ABSTRACT

Background: University dropout is a persistent problem in higher education, closely linked to psychological processes that affect student adaptation. Among these processes, coping strategies has received little attention, particularly from person-centred approaches. The objective of this study is to explore coping profiles in university students and analyse their relationship with the intention to dropout, as well as the distribution by gender and knowledge area. **Method:** 1,632 first-year students from a Spanish university participated. A latent profile analysis was performed to identify coping profiles, along with multivariate analyses to examine differences in dropout intention and sociodemographic variables. **Results:** Three profiles were identified: Low Coping Profile (LCP), Mixed Engagement-Disengagement Profile (MEDP) and High Emotion-Engagement Profile (HEEP). A clear gradient emerged in dropout intention (LCP > HEEP > MEDP). No statistically significant differences in profile membership were found by gender or field of study. **Conclusions:** The results show that students' coping profiles differ in their vulnerability to dropout intention, underscoring the importance of strengthening adaptive coping resources from the outset of university.

Perfiles de Afrontamiento y su Relación con la Intención de Abandono en Estudiantes Universitarios

RESUMEN

Palabras clave:

Abandono universitario
Perfiles de afrontamiento
Perfiles latentes

Antecedentes: El abandono universitario constituye un problema persistente en la Educación Superior, estrechamente vinculado a procesos psicológicos que condicionan la adaptación del alumnado. Entre ellos, las estrategias de afrontamiento han recibido escasa atención, especialmente desde enfoques centrados en la persona. El objetivo es explorar los perfiles de afrontamiento en estudiantes universitarios y analizar su relación con la intención de abandono, así como su distribución según género y área de conocimiento. **Método:** Participaron 1.632 estudiantes de primer curso de una universidad española. Se realizó un análisis de perfiles latentes para identificar perfiles de afrontamiento, junto con análisis multivariados para examinar diferencias en intención de abandono y variables sociodemográficas. **Resultados:** Se identificaron tres perfiles: Perfil de Bajo Afrontamiento (LCP), Perfil Mixto de Engagement-Disengagement (MEDP) y Perfil de Alto Engagement Emocional (HEEP). Emergió un gradiente claro en la intención de abandono (LCP > HEEP > MEDP). No se encontraron diferencias estadísticamente significativas en la pertenencia a los perfiles por género y área de estudio. **Conclusiones:** Los resultados muestran que los perfiles de afrontamiento difieren en su vulnerabilidad a la intención de abandono, lo que subraya la importancia de fortalecer los recursos adaptativos de afrontamiento del alumnado desde el inicio de la vida universitaria.

University dropout has significant psychological implications for students, who frequently experience reduced motivation and engagement, and increased emotional distress (Buizza et al., 2024; Mâta et al., 2024). The magnitude of the issue is evident: in Spain, 22.1% of students do not continue after their first university year (Ministerio de Ciencia, Innovación y Universidades, 2026), and there is similar variability across Europe, where first-year dropout rates range from 5.4% in Finland, to over 18% in Belgium, Slovenia and Poland (European Commission, 2025). Conceptualising dropout as a psychologically and contextually shaped phenomenon underscores the need for frameworks explaining how students decide whether to remain on their courses or dropout.

The *Psychological Model of College Student Retention* (Bean & Eaton, 2001), provides a comprehensive framework for understanding the psychological mechanisms underlying students' decisions to persist or dropout. According to this model, students enter university with personal expectations, beliefs, and prior experiences that shape how they interpret the university environment. These interactions activate three key psychological processes—self-efficacy, causal attributions, and coping strategies—which influence students' attitudes toward the institution and ultimately give rise to their intention to persist or dropout.

Within this framework, dropout intention is identified as the most proximal antecedent of actual dropout. It can be interpreted as a student's subjective evaluation that continuing to attend university may no longer be viable or desirable, and it is one of the strongest predictors of subsequent dropout behaviour (Maluenda-Albornoz et al., 2022). This makes dropout intention particularly important when looking at dropout during the first year—a period characterised by the increased demands of academic, social, and emotional adjustment that mean students are more vulnerable to doubts about their academic careers (Linden et al., 2025; Parsons et al., 2023). According to national and European data, a student's first academic year is where dropout is most concentrated, underscoring the need to understand the psychological responses that shape students' persistence during this transition.

Lazarus and Folkman's *Transactional Theory of Stress* (1986) is particularly useful for understanding coping in first-year students because it conceptualizes stress as the result of an interaction between the individual and the environment. Accordingly, when faced with academic stressors—such as workload, teaching methodologies, assessment systems, or the pressure to perform (Cabanach et al., 2016)—students first engage in primary appraisal, evaluating whether these demands represent a threat or challenge. Then during secondary appraisal, they assess the resources available for coping with the situation.

From this theoretical standpoint, coping strategies play a central role in shaping dropout intention. Coping has traditionally been classified according to its focus (problem-focused vs. emotion-focused) and orientation (engagement vs. avoidance). Problem-focused coping emphasizes managing the stress-inducing situation itself, whereas emotion-focused coping prioritizes regulation of the affective response to the problem (Tous-Pallarés et al., 2022). In terms of orientation, engagement strategies are efforts aimed at directly managing the situation or the emotions underlying it, whereas avoidance strategies involve attempts to limit exposure to the stressor by avoiding threatening situations altogether (Zimmer-Gembeck & Skinner, 2016).

Empirical evidence suggests that engagement-oriented coping strategies (whether problem-focused or emotion-focused) are more adaptive, since they promote persistence and well-being; on the contrary, disengagement-oriented coping strategies (problem-focused and emotion-focused) are associated with dysfunctional outcomes, such as poorer academic adjustment and greater likelihood of dropping out (López-Aguilar et al., 2022; Martín-Arbós et al., 2024; Reyes-Pérez et al., 2021; Rogers et al., 2016). These findings highlight a key mechanism: coping shapes students' appraisals of their ability to continue at university. When disengagement strategies predominate, academic demands are more likely to be interpreted as overwhelming, reducing self-efficacy or academic integration (Pi et al., 2024; Schladitz et al., 2024; Torquati et al., 2025)—factors identified as precursors of dropout intention (Bean & Eaton, 2001). Conversely, engagement-focused strategies support adaptive appraisal by supporting emotional regulation and activating problem-solving (Alves et al., 2022; Mize, 2024).

Despite this, focusing on individual strategies may obscure the complexity of students' responses. There is growing evidence that first-year students rarely rely on a single coping style. Instead, they often combine engagement and disengagement strategies, yielding a hybrid pattern in which the same student may be confronting, regulating, and avoiding stress (Smart et al., 2025; Thomas et al., 2024). A person-centred approach, such as Latent Profile Analysis (LPA), allows these patterns of co-occurrence to be identified and offers a more nuanced understanding of the diversity of student trajectories (González-Casas et al., 2025).

Moreover, coping styles do not emerge in isolation but are shaped by personal and contextual factors (Vidal-Conti et al., 2018). For example, women tend to use more emotion-focused strategies, whereas men are more likely to adopt avoidant or problem-focused styles (Coppola et al., 2024; Martínez et al., 2019). Similarly, a student's field of study may influence their perceptions of stressors and the responses to them, given the diversity of academic demands, teaching methodologies, and disciplinary cultures across academic domains (Bernardo et al., 2025; González-Casas et al., 2025). Understanding how these factors intersect with coping profiles is essential for identifying groups who may be more vulnerable to disengagement-based coping and, consequently, to stronger dropout intentions.

In line with this evidence, the present study adopts a person-centred approach to explore how coping strategies shape distinct profiles in first-year university students and how these profiles are related to university dropout intention. This involves the following specific objectives: (1) To identify different latent profiles based on the coping strategies students use, (2) To examine university dropout intention in the identified latent profiles, and (3) To analyse the sociodemographic characteristics (gender and field of study) associated with each of the identified latent profiles.

Method

Participants

The sample consisted of first-year undergraduate students from a public university in northern Spain with approximately 21,000 enrolled students, of whom 4,416 were first-year undergraduates. To achieve the best population representativeness, all first-year students enrolled in the academic programs offered by the university

were invited to participate, resulting in the inclusion of 66 degree programs. First-year students who were minors (age < 18) at the time of data collection, and those with atypical ages ($Z > 3$), were excluded from the study, yielding 33 removals.

The final sample comprised 1,632 students aged between 18 and 25 years old ($M = 18.45$; $SD = 1.01$). Just over half (904; 55.4%) of the participants were women, 704 (43.1%) were men, and 5 (0.3%) identified as non-binary. The remaining participants (19; 1.2%) chose not to disclose this information. With respect to fields of study, 658 (40.3%) were enrolled in degrees related to Social and Legal Sciences, 335 (20.5%) in Engineering, 262 (16.1%) in Sciences, 252 (15.4%) in Health Sciences, and 125 (7.7%) in Arts and Humanities.

Instruments

Coping strategies were assessed using the *Coping Strategy Indicator – Short Form* (CSI-SF; Tous-Pallarés et al., 2022). It consists of 16 items that are rated on a 5-point Likert scale (1 = *never*; 5 = *almost always*) and is structured into four factors: Emotion-Focused Engagement (EFE, e.g., “I try to talk to a friend or family member”), Problem-Focused Engagement (PFE, e.g., “I make an action plan and I follow it”), Emotion-Focused Disengagement (EFD, e.g., “I’m waiting for a miracle”), and Problem-Focused Disengagement (PFD, e.g., “I hope the problem solves itself”). In the present study, the psychometric properties were as follows: EFE (reliability: $\alpha = .69$; $\omega = .73$, 95% IC [.71, .75], construct validity: $\chi^2(2) = 58.88$; CFI = .96; GFI = .98; RMSEA = .13; SRMR = .05); PFE (reliability: $\alpha = .57$; $\omega = .57$, 95% IC [.54, .61], construct validity: $\chi^2(2) = 26.20$; CFI = .95; GFI = .99; RMSEA = .08; SRMR = .03); EFD (reliability: $\alpha = .62$; $\omega = .68$, 95% IC [.65, .70], construct validity: $\chi^2(2) = 77.34$; CFI = .94; GFI = .98; RMSEA = .15; SRMR = .06); PFD (reliability: $\alpha = .63$; $\omega = .62$, 95% IC [.59, .65], construct validity: $\chi^2(2) = 164.85$; CFI = .83; GFI = .95; RMSEA = .32; SRMR = .08).

Although some factors exhibited questionable internal consistency values, they are comparable to those reported in the original validation of the instrument (Addison et al., 2007). According to Loewenthal and Lewis (2001), in scales with a limited number of items, Cronbach’s alpha values around .60 may be considered acceptable. In this regard, for the three factors with alpha values close to .60, the mean inter-item correlations (Briggs & Cheek, 1986) fell within the optimal range ($r = .20 - r = .40$): PFE ($r = .25$), PFD ($r = .30$), EFD ($r = .28$). These results indicate adequate item covariation despite the brevity of the scale, supporting the instrument’s internal consistency. Likewise, the CFA fit indices seem to indicate that, except for some parameters (especially the RMSEA), in general terms the model demonstrated acceptable construct validity.

Dropout intention was assessed using two complementary formats: a dichotomous measure and a Likert-type scale. First, a dichotomous item: “Have you ever thought about dropping out of your current course of study?” (answer: yes/no) was used to assess the presence or absence of dropout intention. This item is part of the Early University Dropout Intention Questionnaire –EUDIQ–R– (Bernardo et al., 2022). Second, five items were designed ad hoc to capture different types of dropout: discontinuing university education altogether (“I have sometimes thought about dropping out of university and not continuing my studies at all”); entering employment (“I have sometimes thought about dropping out of university to join the workforce”); changing degree course (“I

have sometimes thought about changing the degree I am studying and enrolling in another university degree program”); continuing to study at another university (“I have sometimes thought about continuing my university studies at another university”); and enrolling in vocational education and training programs (“I have sometimes thought about dropping out of university and continuing my studies with a vocational education and training program”). Responses to these questions were recorded on a four-point Likert-type scale (1 = *strongly disagree*; 4 = *strongly agree*).

Procedure

The study was conducted with the collaboration of the administrative teams in the different faculties at the participating university, who selected the teaching staff involved in data collection. Teaching staff received brief training on the study objectives and in the online administration of the instruments. Data were collected during the second semester of the 2024–2025 academic year.

The study was approved by the Ethics Committee at the participating university (Ref.: 40_RRI_2023). Participants were provided with written information regarding the study objectives, the voluntary nature of participation, and the confidential and anonymous treatment of data. Participation was formalized through the provision of informed consent.

Data Analysis

Coping profiles were identified via Latent Profile Analysis –LPA– (Lanza et al., 2003), conducted using Mplus version 7.11 (Muthén & Muthén, 2012). The maximum likelihood with robust standard errors (MLR) criterion was used, as well as full information maximum likelihood (FIML) as a method for handling missing data. In specifying the models, variances were allowed to differ across indicators within each profile, while being constrained to be equal across profiles. In addition, local independence among indicators was imposed as a model constraint, both within and across profiles. To avoid local maxima, 500 random starts and 100 final iterations were established (Starts = 500 100). In addition, the variables were standardized using the command OUTPUT = STDXY.

Model selection was based on the following indices of fit: Akaike Information Criterion (AIC), Bayesian Information Criterion (BIC), sample-size adjusted BIC (SSA-BIC), the Lo–Mendell–Rubin adjusted likelihood ratio test (LMRT), the parametric bootstrap likelihood ratio test (PBLRT), and class sample sizes. Lower values of AIC, BIC, and SSA-BIC indicate better model fit; however, final model selection relied primarily on the LMRT and PBLRT. The p values associated with these tests indicate whether a solution with more classes ($p \leq .05$) or fewer classes ($p > .05$) provides a better fit to the data. Additionally, solutions containing spurious classes ($\leq 5\%$ of the sample) were excluded, as that would suggest overextraction of profiles (Hipp & Bauer, 2006).

Once the optimal model was selected, classification accuracy was evaluated using posterior probabilities and the entropy statistic, which ranges from 0 to 1, with values closer to 1 indicating greater classification accuracy. Model validity was further examined through MANOVA, assessing differences between classes across the four coping variables (EFE, PFE, EFD, and PFD). Statistically significant differences between classes were interpreted as evidence that the latent profiles were meaningfully distinct.

Differences between the identified profiles in the various modalities of dropout intention (permanently stopping university study, dropping out to enter employment, enrolling in another degree program, transferring to another university, or enrolling in vocational education and training) were examined using MANCOVA, with gender and age as covariates. Effect sizes were estimated using partial eta squared (η_p^2) and Cohen's *d*, applying the following criteria: no effect ($\eta_p^2 < .01$; $d < 0.09$), small effect ($\eta_p^2 = .01-.058$; $d = 0.10-0.49$), medium effect ($\eta_p^2 = .059-.137$; $d = 0.50-0.79$), and large effect ($\eta_p^2 \geq .138$; $d \geq 0.80$).

To further explore the identified profiles, dropout intention was compared between profiles. In addition, differences in profile distribution as a function of field of study and gender were examined using Pearson's chi-square test of independence, with Cramer's *V* used as an effect size estimator ($V \leq .20$, small effect; $V = .21-.59$, medium effect; $V \geq .60$, large effect). These analyses were conducted using SPSS version 26.0 (IBM Corp., 2019).

Results

Identification of Stress Coping Profiles

Once the existence of missing values was ruled out, the fit of several latent profile models ($k = 2$ to $k = 5$) was examined.

Table 1 presents the results of the model fit analyses. All reported models converged on a stable solution, confirmed by the stability of the log-likelihood (LL) value across multiple random starts. Model estimation was discontinued at the five-class solution because this solution yielded non-significant values for LMRT and PBLRT ($p > .05$), indicating that the fit of this model was no better than the four-class model. Likewise, the four-class solution was discarded because, despite producing significant values for LMRT and PBLRT ($p \leq .05$), it included one class comprising less than 5% of the total sample (0.55%, $n = 9$). Moreover, the values of other parameters (AIC, BIC, SSA-BIC, entropy) were very similar to those for the three-class model.

Table 1
Fit Indices for Latent Profile Model Identification and Classification Accuracy

	<i>k</i> = 2	<i>k</i> = 3	<i>k</i> = 4	<i>k</i> = 5
AIC	13355.922	13215.376	13142.477	13093.122
BIC	13426.090	13312.532	13266.621	13244.254
SSA-BIC	13384.791	13255.349	13193.554	13155.303
Entropy	.597	.642	.681	.681
$n \leq 5\%$	0	0	1	1
LMRT	192.950*	150.546*	82.899*	59.355
PBLRT	187.870*	146.583*	80.717*	57.792

Note. AIC = Akaike Information Criterion; BIC = Schwarz Bayesian Information Criterion; SSA-BIC = BIC adjusted for the sample size; LMRT = adjusted Lo-Mendell-Rubin maximum likelihood ratio test; PBLRT = Parametric Bootstrap likelihood ratio test.

* $p < .01$.

Overall, the three-class model exhibited the most favourable indices of fit, with statistically significant values for LMRT and PBLRT, as well as lower AIC, BIC, and SSA-BIC values compared to the two-class model. In addition, the MANOVA results support the adequacy of the selected model, showing statistically significant differences between the three classes across all criterion variables: EFE ($F(2,1629) = 75.445$; $p < .001$; $\eta_p^2 = 0.369$), PFE ($F(2,1629) = 225.489$; $p < .001$; $\eta_p^2 = 0.217$), EFD ($F(2,1629) = 261.399$; $p < .001$; $\eta_p^2 = 0.242$), PFD ($F(2,1629) = 399.775$; $p < .001$; $\eta_p^2 = 0.329$).

The classification accuracy of the three-class model was examined using both the entropy statistic and the average posterior probabilities. Although the value of entropy for the three-class model was modest (0.642), this parameter tends to decrease when sample sizes are large (Wang et al., 2017). Furthermore, as Table 2 shows, the average posterior probabilities indicated that the classification accuracy in the three classes was similar and adequate (over .75).

Table 2
Characterization of Latent Profiles and Individual Classification Accuracy for Each Profile

	1	2	3	<i>n</i>	%
1. LCP	.788	.175	.037	259	15.87
2. MEDP	.089	.865	.046	1,215	74.45
3. HEED	.052	.200	.748	158	9.68

Note. LCP = Low Coping Profile; MEDP = Mixed Engagement–Disengagement Profile; HEED = High Emotion-Engagement Profile.

Further evidence that the selected model is relevant lies in its theoretical significance, supported by the fact that it is consistent with previously identified coping profiles in the literature. Table 3 shows the mean scores from participants belonging to the latent classes in the selected model (both raw and standardized scores), and Figure 1 provides a graphical representation of these profiles:

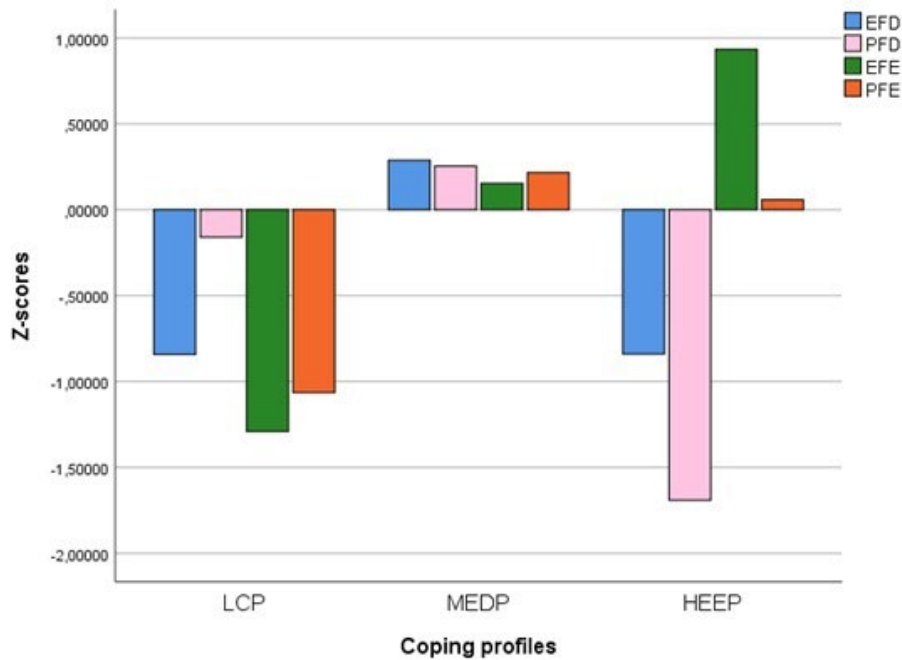
- *Low Coping Profile* (LCP; $n = 259$; 15.87%): Students with low scores in all strategies, both engagement (both problem- and emotion- focused) and disengagement (both problem- and emotion-focused).
- *Mixed Engagement-Disengagement Profile* (MEDP; $n = 1,215$; 74.45%): Students with moderately high scores across all four types of coping strategies.
- *High Emotion-Engagement Profile* (HEED; $n = 158$; 9.68%): Students with high scores in emotion-focused engagement strategies, very moderate scores in problem-focused engagement strategies and low scores in disengagement strategies (both problem- and emotion-focused).

Table 3
Means, Standard Errors, and Confidence Intervals for the Three-class Latent Solution

		95% CI			
		<i>M</i>	<i>SE</i>	LL	UL
LCP	PFE	2.81 (–1.07)	.09	2.66	2.97
	EFE	2.07 (–1.29)	.09	1.93	2.22
	PFD	2.96 (–0.16)	.11	2.77	3.14
	EFD	3.17 (–0.84)	.13	2.96	3.38
MEDP	PFE	3.57 (0.22)	.04	3.51	3.63
	EFE	2.70 (0.15)	.03	2.65	2.76
	PFD	3.64 (0.25)	.03	3.59	3.68
	EFD	3.44 (0.29)	.04	3.38	3.50
HEED	PFE	3.97 (0.06)	.11	3.79	4.15
	EFE	2.02 (0.93)	.11	1.84	2.20
	PFD	3.50 (–1.69)	.15	3.25	3.75
	EFD	2.20 (–0.84)	.11	2.02	2.38

Note. LCP = Low Coping Profile; MEDP = Mixed Engagement–Disengagement Profile; HEED = High Emotion-Engagement Profile; PFE = Problem-Focused Engagement; EFE = Emotion-Focused Engagement; PFD = Problem-Focused Disengagement; EFD = Emotion-Focused Disengagement. Standardized mean scores (*z*) are shown in parentheses.

Figure 1
Graphical Representation of Coping Profiles



Note. LCP = Low Coping Profile; MEDP = Mixed Engagement–Disengagement Profile; HECP = High Emotion-Engagement Profile; PFE = Problem-Focused Engagement; EFE = Emotion-Focused Engagement; PFD = Problem-Focused Disengagement; EFD = Emotion-Focused Disengagement.

Differences in Dropout Intentions between Coping Profiles

After controlling for the effects of gender and age, the results of the MANCOVA indicated statistically significant differences between profiles ($\lambda_{\text{Wilks}} = .977$, $F(10,3246) = 3.820$, $p < .001$, $\eta_p^2 = .012$), with a small effect size. Additionally, the covariate age was statistically significant ($F(5,1623) = 11.502$, $p < .001$, $\eta_p^2 = .034$), although the effect size was small.

Statistically significant differences were also found between coping profiles in four of the five modalities of dropout intention: stopping university altogether ($F(2,1629) = 7.317$, $p < .001$, $\eta_p^2 = .01$); entering employment ($F(2,1629) = 35.718$, $p < .01$, $\eta_p^2 = .02$); enrolling in another degree program ($F(2,1629) = 9.922$, $p < .001$, $\eta_p^2 = .01$); and enrolling in vocational education and training ($F(2,1629) = 11.984$, $p < .001$, $\eta_p^2 = .02$). In all cases, the effect sizes were small. No significant differences were found between coping profiles in the variable continuing to study at another university ($F(2,1629) = 2.375$, $p = .093$).

Table 4 shows the descriptive statistics from the MANCOVA. Across the five dimensions analysed, the LCP group exhibited the highest scores in dropout intention, whereas the MEDP group exhibited the lowest scores in all five dimensions. Differences between these two profiles were statistically significant in four of the five intention to dropout variables: stopping university altogether ($d = 0.26$), entering employment ($d = 0.24$), enrolling in another degree program ($d = 0.28$), and enrolling in vocational education and training ($d = 0.29$). The effect sizes were small in all cases.

There were also statistically significant differences between the MEDP and the HECP groups in enrolling in vocational education and training, although the effect size was small ($d = 0.19$).

Table 4

Descriptive Statistics for Coping Profiles across Dimensions of Dropout Intention

	Coping profiles					
	LCP (<i>n</i> = 259)		MEDP (<i>n</i> = 1,215)		HECP (<i>n</i> = 158)	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Stopping university altogether ^a	1.48	0.69	1.31	0.64	1.37	0.68
Entering employment ^b	1.74	0.87	1.55	0.74	1.65	0.85
Changing degree programs ^c	2.24	1.07	1.95	1.01	2.15	1.10
Continuing to study at another university ^d	1.97	0.97	1.83	0.94	1.91	1.06
Enrolling in vocational education and training programs ^e	1.69	0.93	1.44	0.77	1.60	0.90
Significant comparisons	^a LCP-MEDP ($d = 0.26$) ^b LCP-MEDP ($d = 0.24$) ^c LCP-MEDP ($d = 0.28$) ^d LCP-MEDP ($d = 0.29$) ^e MEDP-HECP ($d = 0.19$)					

Note. LCP = Low Coping Profile; MEDP = Mixed Engagement–Disengagement Profile; HECP = High Emotion-Engagement Profile.

Characterization of University Dropout Intention

A statistically significant association was found between profile membership and dropout intention, although the effect size was small ($\chi^2 = 47.34$, $df = 2$, $p < .001$, $V = .17$).

The results indicate that in the three coping profiles, 27.03% of students ($n = 441$) reported dropout intentions (Table 5). The profile

with the largest proportion of students expressing dropout intention was LCP (43.24%), followed by HEEP (32.28%). The lowest percentage was in the MEDP profile (22.88%).

Table 5
Percentages of Dropout Intention across Coping Profiles

		LCP	MEDP	HEEP	Total
Dropout intention	<i>n</i>	112	278	51	441
	%	43.24	22.88	32.28	27.03
No dropout intention	<i>n</i>	147	937	107	1,191
	%	56.76	77.12	67.72	72.97

Note. LCP = Low Coping Profile; MEDP = Mixed Engagement–Disengagement Profile; HEEP = High Emotion-Engagement Profile.

Distribution of Field of Study and Gender Variables

The association between latent profile membership and field of study was not statistically significant ($\chi^2 = 12.88$, $df = 8$, $p = .12$, $V = .06$). This finding seems to indicate that the proportion of students in each of the identified coping profiles is very similar across the five knowledge areas.

As Table 6 shows, the most widely represented profile was MEDP, with 74.4% of students in the five fields of knowledge belonging to this group. Only Arts and Humanities students were slightly below this percentage (MEDP, 68.8%). Around 15% (15.9%) of students in each of the fields of knowledge would fall into the LCP category. This is not an insignificant proportion, given that this profile of students seems to lack strategies (either engagement- or disengagement-focused) when it comes to dealing with academic demands. In this regard, the percentage of students (19.85%) who fit this profile in the Sciences is particularly noteworthy.

Finally, the HEEP profile was the least represented of the three profiles in the five knowledge areas (9.7%). The highest percentages were among Arts and Humanities students (13.6%), while the lowest representation of the profile was in students studying Sciences (7.63%).

Table 6
Percentage Representation of Coping Profiles across Different Fields of Study

		LCP	MEDP	HEEP	Total
Arts and Humanities	<i>n</i>	22	86	17	125
	%	17.6	68.8	13.6	100
Sciences	<i>n</i>	52	190	20	262
	%	19.85	72.52	7.63	100
Health Sciences	<i>n</i>	34	197	21	252
	%	13.5	78.2	8.3	100
Social and Legal Sciences	<i>n</i>	92	493	73	658
	%	13.98	74.92	11.1	100
Engineering	<i>n</i>	59	249	27	335
	%	17.61	74.33	8.06	100
Total	<i>n</i>	259	1,215	158	1,632
	%	15.87	74.45	9.68	100

Note. LCP = Low Coping Profile; MEDP = Mixed Engagement–Disengagement Profile; HEEP = High Emotion-Engagement Profile.

The association between coping profile membership and gender was analysed after excluding participants who chose not to disclose their gender and non-binary participants due to the low sample representation ($n = 24$). This relationship was not statistically significant ($\chi^2 = 3.46$, $df = 2$, $p = .18$, $V = .05$), suggesting that the three profiles identified are homogeneously represented by women and men.

As Table 7 shows, both women and men were primarily concentrated in the MEDP profile (74.89% and 74.43%, respectively). Men were slightly more represented in LCP (17.05%) than women (14.49%), whereas women were slightly more represented in HEEP (10.62%) than men (8.52%).

Table 7
Percentage Representation of Coping Profiles by Gender

		LCP	MEDP	HEEP	Total
Women	<i>n</i>	131	677	96	904
	%	14.49	74.89	10.62	100
Men	<i>n</i>	120	524	60	704
	%	17.05	74.43	8.52	100

Note. LCP = Low Coping Profile; MEDP = Mixed Engagement–Disengagement Profile; HEEP = High Emotion-Engagement Profile.

Discussion

The present study provides insight into how coping strategies are organised into different patterns among university students and how these relate to dropout intention. Adopting a person-centred perspective is particularly important in a context where dropout is a multifactorial phenomenon and psychological processes play a key role in students' adaptation to academic demands (Bean & Eaton, 2001; Diaz-Mujica et al., 2019).

Regarding the first objective, three coping profiles were identified: a Low Coping Profile (LCP, 15.87%), a Mixed Engagement-Disengagement Profile (MEDP, 74.45%), and a High Emotion-Engagement Profile (HEEP, 9.68%). The LCP includes students who mobilise few coping resources, neither engaging with academic difficulties nor resorting to avoidance, a pattern that may reflect uncertainty or a still-developing regulatory repertoire (Aldridge & Roesch, 2008). The HEEP describes students who rely predominantly on emotion-focused engagement, combining strong affective involvement and efforts to regulate emotions with only moderate use of problem-focused strategies. This configuration suggests a tendency to remain emotionally connected to academic demands, while mobilising instrumental action in a more limited manner (Smart et al., 2025). Finally, the MEDP, the largest group, represents a heterogeneous configuration in which engagement and disengagement strategies coexist, indicating a tendency to alternate between confronting stressors and distancing oneself from them, depending on situational demands (Kato, 2023).

This differentiation is consistent with recent international evidence. For instance, Thomas et al. (2024) identified two broad orientations—approach-oriented patterns, characterised by active, problem-focused and engagement-based strategies, and avoidance-oriented patterns, defined by behavioural and cognitive withdrawal. Although the present study yielded a three-profile structure, these profiles map onto this distinction: the HEEP profile reflects a predominantly emotional form of engagement, LCP shows minimal mobilisation of either type of strategy, and MEDP represents an intermediate or mixed configuration where engagement and disengagement co-occur.

While these empirical distinctions help interpret the profiles, they also intersect with the students' developmental stage. Most participants were in late adolescence or emerging adulthood, a period characterised by ongoing consolidation of self-regulatory abilities and greater variability in coping responses (Folker et al., 2025; Wesarg-Menzel et al., 2023). This is particularly salient

during the transition to university, which requires renegotiating autonomy, identity and academic competence. Evidence from Takács et al. (2021) reinforces this interpretation, showing more variable coping patterns among younger university entrants. Such developmental variability is reflected in the predominance of the MEDP, which may represent an exploratory configuration, and in the smaller proportions of LCP and HEPP, profiles that may reflect more consolidated tendencies—either limited mobilisations of coping resources (LCP) or a predominantly emotional form of engagement (HEPP).

Following profile identification, the second objective examined dropout intention within each profile. The pattern of results indicated a clear gradient: the Low Coping Profile (LCP) had the highest proportion of students reporting dropout intention (43.24%), followed by the High Emotion-Engagement Profile (HEPP; 32.27%), whereas the Mixed Engagement-Disengagement Profile (MEDP) had the lowest percentage (22.88%). These proportions were consistent with the MANCOVA results, which showed significant differences between profiles in several dropout modalities—mainly reflecting higher scores in the LCP and lower scores in the MEDP—with small effect sizes.

Moreover, this gradient is consistent with psychological models of student persistence, which argue that coping processes shape appraisals, self-efficacy, and academic/emotional integration—the proximal antecedents of dropout intention (Bean & Eaton, 2001; Tinto, 2006). In person-centred research with university samples, recent latent-profile studies have consistently shown that mixed or intermediate coping configurations tend to be more adaptively positioned than profiles predominantly marked by avoidance or low resource-mobilisation, which are linked to greater distress and poorer academic adjustment (Schlesier & Westphal, 2023; Smart et al., 2025; Thomas et al., 2024).

Interpreted through the transactional framework, MEDP students may benefit from regulatory flexibility—the capacity to alternate between engagement and limited, situational disengagement in line with appraisal of controllability (Leslie-Miller et al., 2025)—thereby buffering stress appraisals, sustaining self-efficacy, and reducing dropout intention. In contrast, the LCP restricts options for problem-solving and emotion regulation, undermining perceived manageability (Smart et al., 2025) and increasing doubts about continuing academically. Finally, although the HEPP reflects adaptive emotional engagement, its moderate problem-focused component may leave instrumental academic demands insufficiently addressed (Alves et al., 2022), which may explain its middle position in dropout intention.

Across the three profiles, the most frequent modality of dropout was the intention to change to another degree program or another university. This pattern is in line with recent findings indicating that for many students, dropout intention reflects a process of academic reorientation rather than a rejection of the university system (Findeisen et al., 2024).

The third objective focused on the distribution of gender and field of study across the identified profiles. No statistically significant differences were found, indicating that women and men, as well as students from different disciplinary areas, were similarly distributed across the three profiles. This contrasts with previous findings reporting gender-linked patterns—such as women's greater use of emotional or avoidant strategies and men's tendency toward problem-

focused coping (Sitinjak et al., 2024; Vidic, 2024). Nonetheless, recent research suggests that gender differences in coping may be highly context-dependent, varying according to cultural, normative, and situational factors (Morales-Rodríguez et al., 2023). Our results support the idea that individual coping tendencies may not manifest uniformly across contexts, and that first-year students may display more heterogeneous and less gender-differentiated patterns.

Similarly, there were no statistically significant associations between coping profiles and knowledge areas. This contrasts with previous studies highlighting discipline-specific patterns in coping and stress perception (Bernardo et al., 2025), such as a predominance of engagement-based strategies in Health Sciences or Social Sciences (Rodríguez-Fernández et al., 2020; Vizoso et al., 2019) and more avoidant styles in Arts and Humanities (Waterhouse & Samra, 2026). The absence of differences may reflect the strong contextual pressures shared by first-year students across degrees, who all face comparable novelty, uncertainty and academic demands, regardless of disciplinary area (Linden et al., 2025; Parsons et al., 2023).

In summary, the results from a Spanish university context highlight the importance of coping strategies as a key psychological mechanism in explaining university dropout intention. The three identified profiles showed distinct patterns of vulnerability, with the MEDP appearing comparatively more protected—consistent with the adaptive value of regulatory flexibility—whereas the LCP and HEPP reflected more constrained or unbalanced regulatory resources. Although gender and field of study did not significantly differentiate profile membership, the overall pattern suggests that during the transition to university, coping may be shaped more strongly by shared developmental and contextual demands than by sociodemographic or disciplinary characteristics. Taken together, these findings underscore the importance of understanding students' coping tendencies within the specific features of the Spanish higher-education context, while offering potentially relevant insights for institutions facing similar first-year adjustment challenges.

Despite the findings, this study has some limitations. First, although the CSI-SF is a commonly used instrument in research on coping, this study did not provide fully satisfactory results regarding its psychometric properties. Consequently, our findings should be interpreted with caution, and they will need to be confirmed by future research.

Second, the cross-sectional design restricts the ability to explore the relationship between coping profiles and dropout intention over time. Future research could incorporate longitudinal methodologies to examine how these coping styles change over time and their impact on academic trajectories.

Finally, the sample was drawn from a single Spanish university. Replicating the study in other institutions and cultural contexts would help assess the generalisability of the identified profiles and clarify the influence of institutional characteristics.

These considerations also provide important context for interpreting the broader implications of the study. At a theoretical level, the identification of three coping profiles reinforces the value of person-centred approaches for understanding how students regulate academic stress during the transition to university. The findings are consistent with psychological models of persistence (Bean & Eaton, 2001), highlighting that coping shapes adaptation through appraisal processes, perceived controllability, and self-efficacy. In this regard, the comparatively more adaptive position of the MEDP

underscores the importance of regulatory flexibility—alternating between engagement and situational disengagement according to controllability appraisals—as a key mechanism in emerging adulthood (Zimmer-Gembeck & Skinner, 2016).

At an applied level, the results point towards strengthening students' regulatory repertoires, enabling complementary use of emotional and problem-focused strategies. As profile membership did not differ by gender or field of study, interventions may be most effective at a general institutional level, targeting first-year cohorts across programmes (Alves et al., 2022). Initiatives that foster constructive interpretations of academic challenges, promote selection of adaptive strategies, and support emotional and academic adjustment may contribute to reducing dropout intention in diverse university contexts.

Author Contributions

Ana B. Bernardo: Conceptualization, Funding Acquisition, Investigation, Project Administration, Supervision, Validation, Writing – Review & Editing. **Elena Blanco:** Conceptualization, Data Curation, Investigation, Visualization, Writing – Original Draft, Writing – Review & Editing. **Carlos Freire:** Data Curation, Formal Analysis, Methodology, Software, Visualization, Writing – Original Draft, Writing – Review & Editing. **María del Mar Ferradás:** Data Curation, Formal Analysis, Methodology, Software, Validation, Writing – Original Draft, Writing – Review & Editing.

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Declaration of Interests

The authors declare that there are no conflicts of interest.

Data Availability Statement

The data described in the manuscript will be available upon request to the corresponding author.

References

- Addison, C. C., Campbell-Jenkins, B. W., Sarpong, D. F., Kibler, J., Singh, M., Dubbert, P., Wilson, G., Payne, T., & Taylor, H. (2007). Psychometric evaluation of a Coping Strategies Inventory Short-Form (CSI-SF) in the Jackson Heart Study Cohort. *International Journal of Environmental Research and Public Health*, 4(4), 289–295. <https://doi.org/10.3390/ijerph200704040004>
- Aldridge, A. A., & Roesch, S. C. (2008). Developing coping typologies of minority adolescents: A latent profile analysis. *Journal of Adolescence*, 31(4), 499–517. <https://doi.org/10.1016/j.adolescence.2007.08.005>
- Alves, S. A., Sinval, J., Lucas, L., Maroco, J., Ferreira, A., & Oliveira, P. (2022). Burnout and dropout intention in medical students: The protective role of academic engagement. *BMC Medical Education*, 22(1), Article 83. <https://doi.org/10.1186/s12909-021-03094-9>
- Bean, J. P., & Eaton, S. (2001). The psychology underling successful retention practices. *Journal College Student Retention: Research, Theory & Practice*, 3(1), 73–89. <https://doi.org/10.2190/6R55-4B30-28XG-L8U0>
- Bernardo, A. B., Blanco, E., Tuero, E., & Herrero, J. (2025). Academic stress and socio-demographic variables as predictors of university dropout intention. *Electronic Journal of Research in Education Psychology*, 23(66), 321–348. <https://doi.org/10.25115/ejrep.v23i66.10127>
- Bernardo, A. B., Esteban, M., Cervero, A., Tuero, E., & Herrero, F. J. (2022). Validation of the Early University Dropout Intentions Questionnaire (EUDIQ-R). *Journal of Higher Education Theory and Practice*, 22(10), 17–29. <https://doi.org/10.33423/jhetp.v22i10.5384>
- Briggs, S. R., & Cheek, J. M. (1986). The role of factor analysis in the development and evaluation of personality scales. *Journal of Personality*, 54(1), 106–148. <https://doi.org/10.1111/j.1467-6494.1986.tb00391.x>
- Buizza, C., Cela, H., Sbravati, G., Bornatici, S., Rainieri, G., & Ghilardi, A. (2024). The role of self-efficacy, motivation, and connectedness in dropout intention in a sample of Italian college students. *Education Science*, 14(81), Article 67. <https://doi.org/10.3390/educsci14010067>
- Cabanach, R. G., Souto-Gestal, A., & Franco, V. (2016). Stressor Academic Scale for the evaluation of academic stressors in undergraduates. *Revista Iberoamericana de Psicología y Salud*, 7(2), 41–50. <https://doi.org/10.1016/j.rips.2016.05.001>
- Coppola, L., Salvo, M., Sassano, G., del Valle, M., & Arias, C. (2024, December 4–6). *Diferencias de género en el uso de estrategias de afrontamiento en estudiantes universitarios* [Gender differences in the use of coping strategies among university students] [Paper presentation]. X Congreso Marplatense Internacional de Psicología, Buenos Aires, Argentina.
- Díaz-Mujica, A., Pérez-Villalobos, M. J., Bernardo, A. B., Cervero, A., & González-Pianda, J. A. (2019). Affective and cognitive variables involved in structural prediction of university dropout. *Psicothema*, 31(4), 429–436. <https://doi.org/10.7334/psicothema2019.124>
- European Commission. (2025). *Main indicators areas. Tertiary education*. Education and Training Monitor 2025, Publications Office of the European Union. <https://op.europa.eu/webpub/eac/education-and-training-monitor/en/monitor-toolbox/themes/tertiary-education.html>
- Findeisen, S., Brodsky, A., Michaelis, C., Chimmelpenningh, B., & Seifried, J. (2024). Dropout intention: A valid predictor of actual dropout? *Empirical Research in Vocational Education and Training*, 16, Article 10. <https://doi.org/10.1186/s40461-024-00165-1>
- Folker, A., Bertrand, C., Hong, Y. L., Steinberg, L., Duell, N., Chang, L., Giunta, L. D., Dodge, K. A., Gurdal, S., Junla, D., Lansford, J. E., Oburu, P., Pastorelli, C., Skinner, A. T., Sorbring, E., Bornstein, M. H., Tirado, L. M. U., Yotanyamaneewong, S., Alampat, L. P., ... Deater-Deckard, K. (2025). A longitudinal study of adolescent-to-young adult executive function development in seven countries. *Developmental Science*, 28(4), Article e70040. <https://doi.org/10.1111/desc.70040>
- González-Casas, D., Dorado-Barbe, A. I., & Gálvez-Nieto, J. L. (2025). Profiles of coping strategies in university students in relation to personal and academic variables. *Educación XX1*, 28(1), 103–130. <https://doi.org/10.5944/educxx1.39618>

- Hipp, J. R., & Bauer, D. J. (2006). Local solutions in the estimation of growth mixture models. *Psychological Methods*, 11(1), 36–53. <https://doi.org/10.1037/1082-989X.11.1.36>
- IBM Corp. (2019). *SPSS STATISTICS for Windows, Version 26.0*. IBM Corp.
- Kato, T. (2023). Effect of coping flexibility on life satisfaction of college students: A longitudinal study. *Applied Research in Quality of Life*, 18(6), 2981–2991. <https://doi.org/10.1007/s11482-023-10215-7>
- Lanza, S. T., Flaherty, B. P., & Collins, L. M. (2003). Latent class and latent transition analysis. In J. A. Schinka & W. F. Velicer (Eds.), *Handbook of psychology: Research methods in psychology* (pp. 663–685). Wiley.
- Lazarus, R. & Folkman, S. (1986). *Estrés y procesos cognitivos* [Stress and cognitive processes]. Ediciones Martínez Roca.
- Leslie-Miller, C. J., Joormann, J., & Quinn, M. E. (2025). Coping flexibility: Match between coping strategy and perceived stressor controllability predicts depressed mood. *Affective Science*, 6, 94–103. <https://doi.org/10.1007/s42761-024-00275-9>
- Linden, K., Teakel, S., & van der Ploeg, N. (2025). Seen and supported: Implementing a university-wide transition framework to improve first-year success. *Student Success*, 16(3), 67–78. <https://doi.org/10.63608/ssj.3761>
- Loewenthal, K. M., & Lewis, C. A. (2001). *An introduction to psychological tests and scales*. Routledge.
- López-Aguilar, D., Álvarez-Pérez, P. R., & Ravelo-González, Y. (2022). Adaptability skills and the intention to drop out in university students. *Revista de Investigación Educativa*, 40(1), 237–255. <https://doi.org/10.6018/rie.463811>
- Maluenda-Albornoz, J., Infante-Villagrán, V., Galve-González, C., Flores-Oyarzo, G., & Berrios-Riquelme, J. (2022). Early and dynamic socio-academic variables related to dropout intention: A predictive model made during the pandemic. *Sustainability*, 14(2), Article 831. <https://doi.org/10.3390/su14020831>
- Martín-Arbós, S., Castarlenas, E., Morales-Vives, F., & Dueñas, J. M. (2024). Students' thoughts about dropping out: Sociodemographic factors and the role of academic help-seeking. *Social Psychology of Education*, 27, 2079–2092. <https://doi.org/10.1007/s11218-024-09903-5>
- Martínez, I. M., Meneghel, I., & Peñalver, J. (2019). Does gender affect coping strategies leading to well-being and improved academic performance? *Revista de Psicodidáctica*, 24(2), 111–119. <https://doi.org/10.1016/j.psico.2019.01.003>
- Măta, L., Cirtita-Buzoianu, C., Amalancei, B. M., Cojocariu, V. M., & Mares, G. (2024). Students' perception of the determining factors of university dropout. *Romanian Journal of Multidimensional Education*, 16(4), 127–153. <https://doi.org/10.18662/rrem/16.4/910>
- Ministerio de Ciencia, Innovación y Universidades. (2026). *Datos y cifras del Sistema Universitario Español. Publicación 2025-2026* [Facts and figures on the Spanish University System. Publication 2025-2026]. Secretaría General Técnica, Centro de Publicaciones, Ministerio de Ciencia, Innovación y Universidades. <https://www.ciencia.gob.es/InfoGeneralPortal/detalle-publicacion/MICIU/Datos-y-cifras-del-Sistema-Universitario-Espanol-2025-2026.html>
- Mize, J. L. (2024). Depression, anxiety, and stress symptoms and coping strategies in the context of the sudden course modality shift in the Spring 2020 semester. *Current Psychology*, 43(5), 3944–3955. <https://doi.org/10.1007/s12144-023-04566-5>
- Morales-Rodríguez, F. M., Martínez-Ramón, J. P., Corvasce, C., & Morales Rodríguez, A. M. (2023). Coping strategies in adolescence: A preliminary study of gender differences. *Acción Psicológica*, 20(1), 21–32. <https://doi.org/10.5944/ap.20.1.39179>
- Muthén, L. K., & Muthén, B. O. (1998-2012). *Mplus User's Guide, 6th ed.* Muthén & Muthén.
- Parsons, J. M., McColl, M. A., Martin, A., & Reynard, D. (2023). Transition and accommodation experiences of students with disabilities: A qualitative study. *Journal of Postsecondary Education and Disability*, 36(2), 179–192. <https://eric.ed.gov/?id=EJ1434801>
- Pi, Y., Wang, Y., Li, X., & Zhang, F. (2024). Reciprocal longitudinal relation between self-efficacy and coping style: The explanatory mechanism of future self-continuity. *Journal of Adolescence*, 96(5), 1078–1090. <https://doi.org/10.1002/jad.12318>
- Reyes-Pérez, V., Muñoz-López, D. B., & Alcázar-Olán, R. (2021). Emotions and coping strategies when university students pass their exams. *Nova Scientia*, 12(25), 1–23. <https://doi.org/10.21640/ns.v12i25.2344>
- Rodríguez-Fernández, A., Maury-Sitjago, E. A., Troncoso-Pantoja, C., Morales-Urzuá, M., & Parras-Flores, J. (2020). Academic stress and coping strategies in students of health degrees in Santiago de Chile. *EduMeCentro*, 12(4), 1-16. <https://dialnet.unirioja.es/servlet/articulo?codigo=9525226>
- Rogers, M. E., Creed, P. A., Searle, J., & Nicholls, S. L. (2016). Coping with medical training demands: Thinking of dropping out, or in it for the long haul. *Studies in Higher Education*, 21(9), 1715–1732. <https://doi.org/10.1080/03075079.2014.999318>
- Schladitz, S., Rölle, D., & Drüge, M. (2024). Is intrinsic motivation related to lower stress among university students? Relationships between motivation for enrolling in a study program, stress, and coping strategies. *Education Sciences*, 14(8), Article 851. <https://doi.org/10.3390/educsci14080851>
- Schlesier, J., & Westphal, A. (2023). Exploring student teachers' latent coping profiles and their relations to perceived stress and stressors. *Stress and Health*, 40, Article e3422. <https://doi.org/10.1002/smi.3422>
- Sitinjak, C., Rakhmawati, E., Almasitoh, U. H., & Febrianty, A. (2024). Unveiling gender differences in adolescent coping: Insights from high school students in Jakarta. *Indigenous*, 9(2), 107–120. <https://doi.org/10.23917/indigenous.v9i2.4308>
- Smart, I., McCabe, M., Bird, L. J., Byrne, M. L., & Cornish, K. (2025). Australian university student coping profiles and psychological distress: A latent profile analysis. *Studies in Higher Education*, 50(1), 93–106. <https://doi.org/10.1080/03075079.2024.2329748>
- Takács, R., Takács, S., Kárász, J. T., Horváth, Z., Oláh, A. (2021). Exploring coping strategies of different generations of students starting university. *Frontiers in Psychology*, 12, Article 740569. <https://doi.org/10.3389/fpsyg.2021.740569>
- Thomas, C. L., Nair, M., & Ganske, J. K. (2024). Coping profiles and mental health outcomes in American university students: A latent profile analysis. *Psychological Reports*, 0(0). <https://doi.org/10.1177/00332941241308501>
- Tinto, V. (2006). Research and Practice of Student Retention: What Next? *Journal of College Student Retention: Research. Theory & Practice*, 8(1), 1-19. <https://doi.org/10.2190/4YNU-4TMB-22DJ-AN4W>
- Torquati, J., Lombardi, C., Cohen, R., Matthews, A., & Brophy-Herb, H. (2025). Mindfulness, coping, and disruptions as predictors of college

- student distress at the beginning of the COVID-19 pandemic. *Journal of American College Health*, 73(4), 1406–1417. <https://doi.org/10.1080/07448481.2023.2277184>
- Tous-Pallarés, J., Espinoza-Díaz, I. M., Lucas-Mangas, S., Valdivieso-León, L., & Gómez-Romero, M. R. (2022). CSI-SF: Psychometric properties of Spanish version of the coping strategies inventory - short form. *Annals of Psychology*, 38(1), 85–92. <https://doi.org/10.6018/analesps.478671>
- Vidal-Conti, J., Muntaner-Mas, A., & Palau, P. (2018). Differences of stress and coping according to gender and how it affects the academic performance of university students. *Contextos Educativos*, 22, 181–195. <https://doi.org/10.18172/con.3369>
- Vidic, Z. (2024). Gender differences on coping, stress, resilience and mindfulness within an academic course intervention with a mindfulness meditation component. *Current Psychology*, 34, 28241–28251. <https://doi.org/10.1007/s12144-024-06395-6>
- Vizoso, C., Arias-Gundín, O., & Rodríguez, C. (2019). Exploring coping and optimism as predictors of academic burnout and performance among university students. *Educational Psychology*, 39(6), 768–783. <https://doi.org/10.1080/01443410.2018.1545996>
- Wang, M. C., Deng, Q., Bi, X., Ye, H., & Yang, W. (2017). Performance of the entropy as an index of classification accuracy in latent profile analysis: A Monte Carlo simulation study. *Acta Psychologica Sinica*, 49(11), 1473–1482. <https://doi.org/10.3724/SP.J.1041.2017.01473>
- Waterhouse, P., & Samra, R. (2026). University students' coping strategies to manage stress: A scoping review. *Educational Review*, 78(2), 127–167. <https://doi.org/10.1080/00131911.2024.2438888>
- Wesarg-Menzel, C., Ebbes, R., Hensums, M., Wagemaker, E., Zaharieva, M. S., Staaks, J. P. C., van den Akker, A. L., Visser, I., Hoeve, M., Brummelman, E., Dekkers, T. J., Schuitema, J. A., Larsen, H., Calonnesi, C., Jansen, B. R. J., Overbeek, G., Huizenga, H. M., & Wiers, R. W. (2023). Development and socialization of self-regulation from infancy to adolescence: A meta-review differentiating between self-regulatory abilities, goals, and motivation. *Developmental Review*, 69, Article 101090. <https://doi.org/10.1016/j.dr.2023.101090>
- Zimmer-Gembeck, M. J., & Skinner, E. A. (2016). The development of coping: Implications for psychopathology and resilience. In D. Cicchetti (Ed.), *Developmental psychology: Risk, resilience, and intervention* (pp. 485–545). John Wiley & Sons. <https://doi.org/10.1002/9781119125556.devpsy410>