

Article

Beyond the Classroom: Lifestyle and Coping as Predictors of University Dropout

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ABSTRACT

Background/objective: A psychological model of university dropout offers a pertinent theoretical framework for determining the impact of psychological factors influence students' initial university experiences. These factors include psychological and behavioural resources that continue to influence students during their transition into university, such as healthy lifestyle practices and coping mechanisms, which have the potential to influence students' capacity to manage academic pressure, establish effective study habits, and confront emotional challenges that impede their educational progress. The objective of this study is to examine the relationship between coping strategies and healthy lifestyle choices, and their impact on Spanish university students' intentions to drop out. **Method:** A total of 1841 university students answered to a measure of coping strategies, healthy lifestyle, and dropout intention. Structural equation modelling was run to modelling the relationships among these variables. **Results:** The results indicate that using adaptive coping strategies was positively associated with a healthy lifestyle, and that a healthy lifestyle, as well as adaptive coping strategies, were negatively associated with the intention to drop out. **Conclusions:** These findings serve to reinforce the validity of the theoretical model and have implications for the design of interventions in the university setting.

Más Allá del Aula: Estilo de Vida y Afrontamiento Como Predictores del Abandono Universitario

RESUMEN

Antecedentes/objetivo: Un modelo psicológico del abandono universitario ofrece un marco teórico pertinente para comprender el impacto que los factores psicológicos tienen en las experiencias iniciales de los estudiantes en la universidad. Estos factores incluyen recursos psicológicos y conductuales que continúan influyendo en los estudiantes durante su transición a la universidad, como los hábitos de vida saludables y las estrategias de afrontamiento, que pueden influir en la capacidad de los estudiantes para gestionar la presión académica, establecer hábitos de estudio eficaces y afrontar desafíos emocionales que dificultan su progreso educativo. El objetivo de este estudio es analizar la relación entre las estrategias de afrontamiento y los estilos de vida saludables, así como su relación con la intención de abandono de los estudiantes universitarios españoles. **Método:** Fueron evaluados 1841 estudiantes universitarios en el estilo de vida saludable y la intención de abandono. Se ejecutó un modelo de ecuaciones estructurales para modelizar la relación entre estas variables. **Resultados:** Los resultados mostraron que el uso de estrategias de afrontamiento adaptativas se asoció positivamente con un estilo de vida saludable y que el estilo de vida saludable y las estrategias de afrontamiento adaptativas se asociaron negativamente con la intención de abandono. **Conclusiones:** Estos hallazgos contribuyen a reforzar la validez del modelo teórico y tienen implicaciones para el diseño de intervenciones en este contexto.

Palabras clave:

Intención de abandono
Educación superior
Presión académica
Estudiantes universitarios
Vida saludable
Modelado

Introduction

University dropout is a complex, multifactorial phenomenon that has been extensively studied in recent years because of its significant impact on educational systems, the development of human capital and consequently on countries' economic growth (Hällsten, 2017; Sarra et al., 2018; Tinto, 2005). The issue affects not only students who stop their courses of study (limiting their employment opportunities and personal development), it also has notable repercussions for universities, the labour market, and society at large.

In the Spanish context, this problem has become increasingly important. Recent national reports indicate that approximately 22% of first-year university students in Spain either drop out or change degree programmes during their first academic year (Ministerio de Universidades, 2025). Dropout rates in higher education underscore the urgent need to understand its underlying causes to design and implement effective preventive strategies that support student retention and academic success (Ministerio de Universidades, 2025). In this regard, identifying and analysing the factors that influence student retention is essential for mitigating the problem, which is one of modern-day universities' main goals (Manrique et al., 2019).

Over the course of dropout research, numerous studies have highlighted a wide range of factors that influence students' continuity and success in higher education. These factors span multiple dimensions, including psychological, social, academic, and affective-motivational domains, which may act independently or interactively in shaping students' decisions to stay in or leave the university system (Álvarez-Pérez et al., 2021; Bean & Eaton, 2001; Constante-Amores et al., 2021; Spady, 1971; Tinto, 1975).

Although academic variables are important predictors of student retention, they do not fully explain dropout processes. Recent evidence suggests that psychological and socio-emotional variables contribute substantially to students' adaptation to university life (Álvarez-Pérez et al., 2021; Alonso-Rodríguez et al., 2020). In this sense, academic factors have traditionally received the most attention, as they cover elements such as academic performance, teaching methodologies, curricular adaptation, and the quality of educational programs—central factors to students' academic pathways. However, the growing concern for overall student well-being has led to increasing interest in examining psychological and socio-emotional variables, which may be equally critical for academic persistence.

Nonetheless, there is still a need for a deeper understanding of the impact of psychological variables related to student well-being on university retention, as recent studies have tended to focus predominantly on academic variables and have often overlooked key aspects such as emotional regulation, self-efficacy, resilience, stress coping strategies, and intrinsic motivation (Álvarez-Pérez et al., 2021; Constante-Amores et al., 2021). These psychological dimensions may play a vital role in how students deal with the inherent challenges of university life, manage academic and social pressures, and sustain their engagement with their education.

Given the growing evidence regarding the role of psychological variables in student persistence, theoretical models that integrate these dimensions become especially relevant. In this regard, the model proposed by Bean & Eaton (2001) provides a relevant theoretical framework for understanding how psychological factors

from before starting university may influence student retention. Their model posits that certain pre-university elements, such as past behaviours and prior learning experiences, significantly shape students' adaptation to the new academic context. Among these prior factors, a healthy lifestyle and coping strategies seem to be key dimensions that may affect students' abilities to manage academic pressure, establish effective study habits, and confront the emotional challenges that may arise during their university experience (Bean & Eaton, 2001).

From this perspective, coping strategies play a crucial role in how students deal with difficulties and adversity throughout university. Consequently, coping strategies have been widely examined in educational contexts due to their role in student adaptation to academic demands. One of the most influential theories in this field is from Lazarus & Folkman (1984), who distinguished between adaptive (functional) and maladaptive (dysfunctional) strategies based on their effectiveness in managing stress. Adaptive strategies promote well-being and resilience and include seeking social support, positive reappraisal, emotional self-regulation, and self-care practices such as physical exercise. In contrast, maladaptive strategies are not only ineffective, but may exacerbate the problem. Examples include avoidance or denial, substance use as an escape, rumination, self-blame, and learned helplessness.

Further contributions, such as those by Tous-Pallarés et al. (2022), have analysed coping strategies along two axes. The first contrasts engagement-focused versus disengagement-focused strategies, while the second distinguishes between problem-solving and emotion-focused approaches. A recent study by González-Casas et al. (2025) found that university students frequently rely on inadequate coping strategies when dealing with stress, which negatively affects their psychosocial well-being. Notably, these trends appeared independent of the academic discipline being studied.

Other recent research has indicated that university students tend to adopt positive attitudes toward stressful situations, employing adequate coping strategies (Awoke et al., 2021), primarily problem-solving, positive reappraisal, and seeking social support (Henderson et al., 2021). However, it is important to note that students experiencing high levels of stress may find it more difficult to cope effectively with these situations (Cruz-Carabajal et al., 2024; Valdez-López et al., 2022). Additionally, use of maladaptive strategies such as avoidance, denial, or emotional disengagement has been associated with increased anxiety and a higher risk of dropping out (Compas et al., 2014).

These findings are consistent with a recent systematic review by Li & Hasson (2020), which analysed studies on the interaction between resilience, academic stress, and well-being among nursing students in various countries. The review concluded that students with a higher number of adaptive coping strategies, and therefore greater resilience, experience lower levels of stress, a key factor in overall well-being.

Beyond coping strategies themselves, other behavioural and health-related factors may also influence students' adaptation to university life. In this sense, healthy lifestyle habits have attracted growing interest in academic research. A healthy lifestyle encompasses a series of habits and behaviours that directly affect students' physical and mental health, including balanced nutrition, adherence to regular meal times, moderation of tobacco and alcohol consumption, sleep quality and duration, (non-)use of

psychoactive substances, and regular physical activity (Leyton-Román et al., 2021). These factors are important because they enhance cognitive functioning, promote emotional stability, and improve coping capacity in stressful university settings.

Multiple studies have shown that students who adopt and maintain healthy lifestyles tend to experience lower levels of stress (Navarro-Sandoval et al., 2024), which positively impacts their emotional well-being and their ability to meet academic demands (Hanawi et al., 2020). Balanced nutrition, in particular, has been linked to improved academic performance and concentration, while adequate rest enhances memory and learning, critical elements for academic success (Acosta, 2019; Ibarra-Mora et al., 2019; Peláez-Barrios & Vernetta, 2021).

Likewise, regular physical activity not only supports cardiovascular health and physical fitness, but also contributes to improved emotional regulation, reduced anxiety, and greater resilience in the face of adversity (García-Hermoso et al., 2021). Evidence suggests that students who maintain healthy routines are more likely to achieve balance between academic and personal responsibilities (Solera & Gamero, 2019), which may contribute to lower dropout intention and greater academic continuity (Suhlman et al., 2018).

Additionally, adaptive coping strategies have been shown to be closely related to various components of a healthy lifestyle. Physical exercise, self-care, and seeking social support are particularly important habits for effectively managing stress and academic pressure (Awoke et al., 2021). For instance, physical exercise has been identified as an effective coping strategy that improves mood and reduces symptoms of anxiety and depression (Panza et al., 2020; Zhang et al., 2024). Similarly, self-care practices involving balanced nutrition and adequate sleep contribute to better responses to high academic demand, while seeking social support helps reduce isolation, strengthen interpersonal bonds, and encourages students to stay at university (Acosta, 2019; Peláez-Barrios & Vernetta, 2021).

Analysing the relationship between a healthy lifestyle and coping strategies indicates several protective factors (both individual and social). These factors directly affect student well-being and are closely linked to the adoption of healthy habits. They include effective stress management, healthy use of free time, development of a meaningful life project, participation in informal support networks, and engaging in recreational activities and sports (Caldera-Montes et al., 2016). These elements function as resilience mechanisms that improve students' abilities to cope with academic and emotional challenges, foster deeper commitment to their education, and significantly reduce dropout risk.

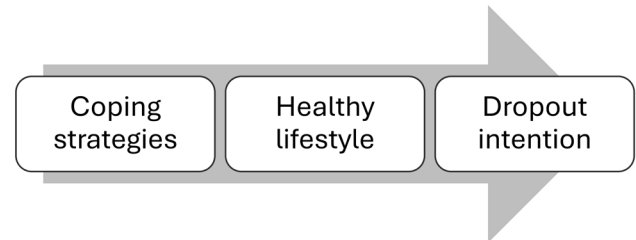
In light of this, the present study is grounded in the coping strategy framework from Lazarus & Folkman (1984), combining it with recent findings on the influence of a healthy lifestyle on student intentions to stay in higher education. These theories, within Bean & Eaton's (2001) model of student persistence, offer a comprehensive lens through which to analyse how students interpret their academic experiences, manage challenges, and care for their physical and mental well-being, key elements for sustaining their academic pathways. The proposed directionality is theoretically grounded in transactional models of stress and coping, which conceptualise coping strategies as regulatory mechanisms that shape behavioural responses, including health-related habits and self-care behaviours.

Objective and Hypothesis

The objective of this study is to analyse the relationship between coping strategies, healthy lifestyles, and Spanish university students' dropout intention. Figure 1 presents the proposed theoretical model.

Figure 1

Relationship Between Coping Strategies, Lifestyle, and the Intention to Drop out of University



Based on the general study objective, the following hypotheses are proposed:

H1. Adaptive coping strategies have a direct, positive effect on healthy lifestyles, such that students' greater use of adaptive coping strategies corresponds to healthier lifestyles.

H2. A healthy lifestyle has a direct, negative effect on dropout intention, such that the healthier a student's lifestyle, the lower their intention to drop out.

H3. Adaptive coping strategies also have a direct, negative effect on dropout intention, such that the greater the use of adaptive coping strategies, the lower the intention to drop out.

Method

Participants

The study included 1841 first-year university students from a university in northern Spain (58% female), ranging from 16 to 53 years old ($M = 18.3$, $SD = 2.4$). Participants were enrolled in degree programs across all academic disciplines: 39.2% in Social and Legal Sciences, 20% in Engineering and Architecture, 17.6% in Health Sciences, 16.2% in Sciences, and 7% in Arts and Humanities.

Instruments

The assessment instruments used in the study were as follows:

Coping strategies. Coping strategies were assessed using the Short Form Coping Strategies Inventory (CSI-sf; Tous-Pallarés et al., 2022), designed to analyse strategies on two axes: engagement- and disengagement-focused strategies, and problem- and emotion-focused strategies. The questionnaire consists of 16 items grouped into four factors: Problem-Focused Engagement (PFE), Problem-Focused Disengagement (PFD), Emotion-Focused Engagement (EFE), and Emotion-Focused Disengagement (EFD). Sample items include: "I make an action plan and follow it", "I hope the problem solves itself" and "I let my feelings out to reduce stress". Responses are given on a 5-point Likert scale (1 = *Never*, 2 = *Rarely*, 3 = *Sometimes*, 4 = *Often*, 5 = *Almost always*). The scale's reliability indices were $\alpha = .408$ and $\omega = .468$. Although these indices are lower than typically recommended thresholds, the

CSI-sf was retained because previous research has highlighted its multidimensional structure and the possibility that global reliability estimates may underestimate the consistency of its differentiated coping dimensions (Tous-Pallarés et al., 2022). Therefore, findings involving this construct should be interpreted cautiously.

Healthy lifestyle. This variable was measured using the Healthy Lifestyle Questionnaire (CEVS-II; Leyton-Román et al., 2021), which includes 27 items across seven dimensions: balanced diet, adherence to meal schedules, tobacco use, sleep habits, alcohol consumption, drug use, and physical activity. Example items include: “I feel good when I smoke”, “I sleep enough hours for my body to be well rested”, “When I exercise, I do it for at least 150 minutes per week, in sessions of at least 10 minutes” and “I usually have breakfast, lunch, and dinner at the same times”. Items are rated on a 5-point Likert scale (1 = *Strongly disagree* to 5 = *Strongly agree*). The scale demonstrated good reliability ($\alpha = .788$, $\omega = .814$).

Dropout intention. Dropout intention was assessed through five *ad hoc* items designed to capture different forms of withdrawal intention, including institutional dropout, labour-market transition, and transfer intention. One of these items was measured with a dichotomous response format (1 = *Yes*, 2 = *No*), whereas the remaining items were rated on a 4-point Likert scale (1 = *Strongly disagree* to 4 = *Strongly agree*). Sample items include: “I have thought about dropping out of university and not continuing with my studies”, “I have considered leaving university to enter the job market” and “I have considered continuing my university studies at another institution”. The scale’s reliability indices were $\alpha = .645$ and $\omega = .685$.

Procedure

First, approval for the study was obtained from the Research and Responsible Innovation Subcommittee of the University of

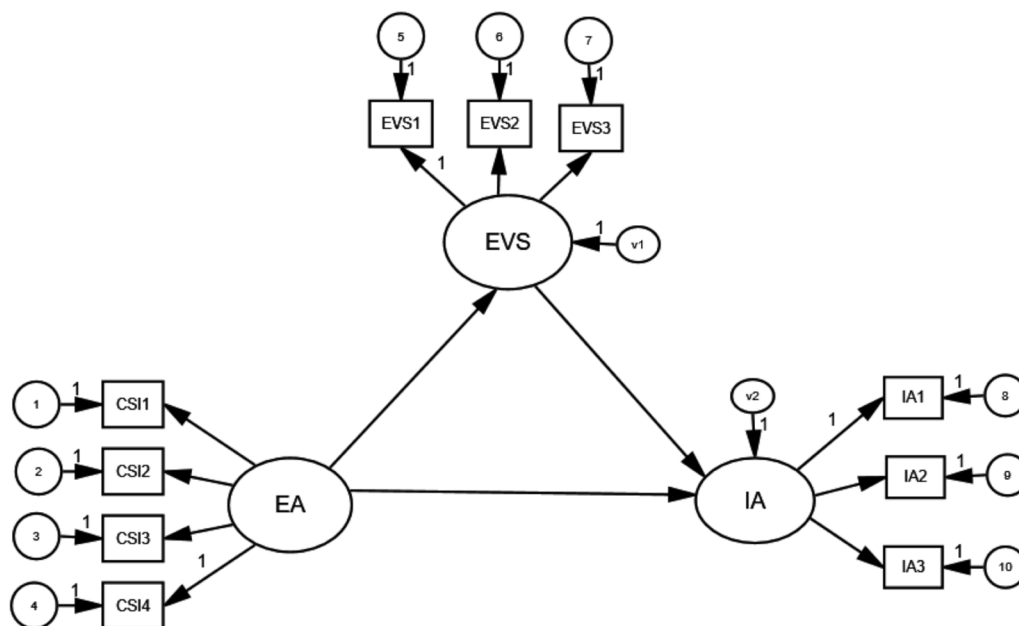
Oviedo Research Ethics Committee (the researchers’ university-3_RRI_2021). Subsequently, the lead researchers contacted various faculty administrators at the university to inform them of the study, asking for their collaboration. University professors were trained to administer the questionnaire to first-year students during class time within the first six weeks of the first semester of academic year 2024-2025. Participation was voluntary, and students completed a set of online self-report instruments integrated into a digital questionnaire platform during class time. Before the administration of the questionnaire, university professors informed students about the aims of the study, the voluntary nature of participation, and the confidentiality and anonymous treatment of the data. This information was also included in the introductory section of the online questionnaire. Informed consent was obtained in compliance with data protection regulations and ethical standards.

Data Analysis

To test the hypotheses, a Structural Equation Model (SEM) was developed (see Figure 2), which was adjusted four times depending on whether the coping strategies referred to engagement or disengagement, and whether lifestyle referred to nutrition (diet, eating habits and sleep) or substance use (tobacco, alcohol and drugs). Nutrition-related lifestyle indicators included eating habits, meal regularity, sleep habits, and physical activity, whereas substance-use lifestyle indicators included tobacco, alcohol, and drug consumption. Separate models were estimated to differentiate between health-promoting and health-risk behavioural dimensions of lifestyle. As Figure 2 shows, the model includes three latent variables (Coping Strategies—EA, Healthy Lifestyle—EVS, Dropout Intention—IA), derived from the participants’ responses to several self-report items.

Figure 2

Structural Equation Model. EA (Coping Strategies: Engagement or Disengagement), EVS (Lifestyle: Nutrition or Substance use), IA (Dropout Intention). CSI1 to CSI4 (Observed Measures), EVS1 to EVS3 (Observed Measures), IA1 to IA3 (Observed Measures). V1 and V2 (Structural Equation Error Terms). 1 to 10 (Measurement Errors for Observed Variables)



The data were processed in several stages. First, we examined the statistical properties of the model variables (means, standard deviations, skewness, and kurtosis), along with the correlation matrix. According to the criteria established by Gravetter & Wallnau (2014), the variable distributions could be considered normal (both skewness and kurtosis fall within ± 3). Model fit was examined using AMOS 22 (Arbuckle, 2013) software. The SEM analysis results were evaluated using commonly accepted criteria: Chi-square, AGFI, TLI, CFI, RMR, and RMSEA. A good fit is indicated when χ^2 has $p > .05$, AGFI and TLI $\geq .90$, CFI $\geq .95$, and both RMR and RMSEA $\leq .06$. Where model re-specifications were required, model selection was guided by the AIC and BIC statistics (the best model is the one with the lowest AIC and BIC values). The effect sizes of the regression coefficients were evaluated using the f^2 criteria: $f^2 \geq 0.02$ = small effect; $f^2 \geq 0.15$ = medium effect; and $f^2 \geq 0.35$ = large effect. Finally, scale reliability was estimated using Cronbach's α and McDonald's ω .

Results

Descriptive Statistics and Correlations

Table 1 presents descriptive statistics and correlation matrices for the four models (engagement-nutrition, engagement-substance use, disengagement-nutrition, disengagement-substance use). Most correlations were statistically significant across the four matrices at $p < .05$ or $p < .01$. Additionally, most variables exhibited a normal distribution of scores, except for IA1 ("I have thought about dropping out of university and not continuing my studies at all"). In general, the direction of the correlations was in line with the hypotheses: dropout intention was negatively associated with both coping strategy use and healthy eating habits and positively associated with substance use.

Model Fit

All four models demonstrated acceptable fit: Engagement-Nutrition: $\chi^2_{(32)} = 115.449$, $p = .001$; AGFI = 0.979, TLI = 0.953,

CFI = 0.966, RMR = 0.027, RMSEA = 0.038 [0.030-0.045]. Engagement-Substance Use: $\chi^2_{(32)} = 106.397$, $p = .001$; AGFI = 0.981, TLI = 0.966, CFI = 0.976, RMR = 0.026, RMSEA = 0.036 [0.028-0.043]. Disengagement-Nutrition: $\chi^2_{(31)} = 76.260$, $p = .001$; AGFI = 0.985, TLI = 0.979, CFI = 0.985, RMR = 0.023, RMSEA = 0.028 [0.020-0.036]. Disengagement-Substance Use: $\chi^2_{(31)} = 69.251$, $p = .001$; AGFI = 0.987, TLI = 0.985, CFI = 0.990, RMR = 0.023, RMSEA = 0.026 [0.018-0.034]. Inspection of modification indices in the disengagement coping strategies models suggested correlating the residuals of indicators EA2 and EA4. This re-specification was theoretically justified by the conceptual overlap between both indicators, which reflect related forms of emotional and behavioural disengagement. The inclusion of this covariance improved model fit and resulted in one fewer degree of freedom in the disengagement models.

Model Evaluation

Table 2 presents statistics for the four SEM models (regression coefficients -direct effects-, estimation errors, and effect sizes). Overall, there were statistically significant effects among the three latent variables (coping strategies, lifestyle, and dropout intention). Use of coping strategies positively was associated with healthy lifestyle behaviours (greater use of coping strategies was associated with better dietary habits) and negatively predicted both substance use and dropout intention. Furthermore, healthy eating habits were associated with reduced dropout intention, while substance use habits were predictive of higher dropout intention. Coping strategies explained 20.1% of the variance in healthy eating habits, and lack of engagement explained 4.2%. Substance use habits were predicted by coping strategies (1.1%) and by lack of engagement (4.1%). Dropout intention was explained by 7.4% (engagement-nutrition), 10.4% (engagement-substance use), 7.2% (disengagement-nutrition) and 8.0% (disengagement-substance use).

Finally, the indirect effects of coping strategies on dropout intention (through eating and substance use habits) were statistically

Table 1
Descriptive Statistics and Pearson Correlations

	IA1	IA2	IA3	EA1	EA2	EA3	EA4	EVS1	EVS2	EVS3
Model 1: Engagement-nutrition										
IA1	----									
IA2	.602**	----								
IA3	.330**	.424**	----							
EA1	-.110**	-.108**	-.104**	----						
EA2	-.069**	-.087**	-.091**	.210**	----					
EA3	-.108**	-.096**	-.126**	.207**	.198**	----				
EA4	-.044	-.040	-.073**	.141**	.253**	.310**	----			
EVS1	-.100**	-.069**	-.110**	.179**	.140**	.127**	.101**	----		
EVS2	-.123**	-.126**	-.105**	.167**	.138**	.159**	.076**	.320**	----	
EVS3	-.126**	-.096**	-.076**	.155**	.145**	.107**	.070**	.237**	.400**	----
M	1.30	1.50	1.41	3.55	3.49	3.85	3.58	3.57	3.64	3.45
SD	0.60	0.74	0.71	0.99	1.02	0.96	0.96	0.82	0.96	1.01
SK	2.23	1.39	1.72	-0.34	-0.22	-0.56	-0.25	-0.45	-0.67	-0.44
KU	5.19	1.29	2.33	-0.28	-0.47	-0.15	-0.38	-0.13	-0.09	-0.59

Table 1
Descriptive Statistics and Pearson Correlations (Continuación)

	IA1	IA2	IA3	EA1	EA2	EA3	EA4	EVS1	EVS2	EVS3
Model 2: Engagement-substance use										
IA1	----									
IA2	.602**	----								
IA3	.330**	.424**	----							
EA1	-.110**	-.108**	-.104**	----						
EA2	-.069**	-.087**	-.091**	.210**	----					
EA3	-.108**	-.096**	-.126**	.207**	.198**	----				
EA4	-.044	-.040	-.073**	.141**	.253**	.310**	----			
EVS1	.098**	.146**	.078**	-.055*	.009	-.020	-.031	----		
EVS2	.105**	.114**	.056**	-.099**	-.017**	-.076**	-.117**	.396**	----	
EVS3	.172**	.184**	.110**	-.087**	.003	-.025	-.019	.541**	.496**	----
<i>M</i>	1.30	1.50	1.41	3.55	3.49	3.85	3.58	1.43	2.18	1.70
<i>SD</i>	0.60	0.74	0.71	0.99	1.02	0.96	0.96	0.91	0.96	0.84
<i>SK</i>	2.23	1.39	1.72	-0.34	-0.22	-0.56	-0.25	2.39	0.47	1.40
<i>KU</i>	5.19	1.29	2.33	-0.28	-0.47	-0.15	-0.38	4.96	-0.56	1.49
Model 3: Disengagement-substance use										
IA1	----									
IA2	.602**	----								
IA3	.330**	.424**	----							
EA1	.110**	.090**	.069**	----						
EA2	.040	.017	.013	.246**	----					
EA3	.147**	.097**	.098**	.466**	.175**	----				
EA4	.058*	.020	.008	.291**	.489**	.211**	----			
EVS1	.098**	.146**	.078**	.058*	.026	.039	.026	----		
EVS2	.105**	.114**	.056*	.172**	.081**	.148**	.096**	.396**	----	
EVS3	.172**	.184**	.110**	.119**	.053*	.089**	.060*	.541**	.496**	----
<i>M</i>	1.30	1.50	1.41	2.34	3.12	2.29	2.95	1.43	2.18	1.70
<i>SD</i>	0.60	0.74	0.71	0.95	1.06	1.19	1.10	0.91	0.96	0.84
<i>SK</i>	2.23	1.39	1.72	0.57	0.02	0.71	0.13	2.39	0.47	1.40
<i>KU</i>	5.19	1.29	2.33	0.14	-0.59	-0.27	-0.60	4.96	-0.56	1.49
Model 4: Disengagement-nutrition										
IA1	----									
IA2	.602**	----								
IA3	.330**	.424**	----							
EA1	.110**	.090**	.069**	----						
EA2	.040	.017	.013	.246**	----					
EA3	.147**	.097**	.098**	.466**	.175**	----				
EA4	.058*	.020	.008	.291**	.489**	.211**	----			
EVS1	-.100**	-.069**	-.110**	-.117**	-.041	-.128**	-.057*	----		
EVS2	-.123**	-.126**	-.105**	-.059*	-.039	-.125**	-.017	.320**	----	
EVS3	-.126**	-.096**	-.076**	-.068**	.010	-.124**	-.011	.237**	.400**	----
<i>M</i>	1.30	1.50	1.41	2.34	3.12	2.29	2.95	3.57	3.64	3.45
<i>DT</i>	0.60	0.74	0.71	0.95	1.06	1.19	1.10	0.82	0.96	1.00
<i>AS</i>	2.23	1.39	1.72	0.57	0.02	0.71	0.13	-0.45	-0.68	-0.44
<i>CU</i>	5.19	1.29	2.33	0.14	-0.59	-0.27	-0.60	-0.13	-0.09	-0.59

Note: EA (Coping strategies: engagement or disengagement), EVS (lifestyle: nutrition or substance use), IA (dropout intention), *M* (mean), *SD* (standard deviation), *SK* (skewness), *KU* (kurtosis).

* $p < .05$, ** $p < .01$.

significant in all four models: engagement-nutrition ($-.072, p < .05$), engagement-substance use ($-.024, p < .05$), disengagement-nutrition ($.042, p < .05$), disengagement-substance use ($.047, p < .05$). The sizes of both direct and indirect effects were small or non-significant.

Table 2
Model Fit Results (Direct Effects)

	Estimate	S.E.	f^2
Model 1: Engagement-Nutrition			
<i>Coping strategies → Healthy lifestyle</i>	.448***	.046	0.38
<i>Healthy lifestyle → Dropout intention</i>	-.161***	.073	0.18
<i>Coping strategies → Dropout intention</i>	-.159***	.063	0.17
Model 2: Engagement-Substance use			
<i>Coping strategies → Healthy lifestyle</i>	-.103**	.044	0.13
<i>Healthy lifestyle → Dropout intention</i>	.237***	.022	0.36
<i>Coping strategies → Dropout intention</i>	-.196***	.032	0.25
Model 3: Disengagement-Substance use			
<i>Coping strategies → Healthy lifestyle</i>	.201***	.052	0.27
<i>Healthy lifestyle → Dropout intention</i>	.232***	.023	0.35
<i>Coping strategies → Dropout intention</i>	.122***	.035	0.17
Model 4: Disengagement-nutrition			
<i>Coping strategies → Healthy lifestyle</i>	-.206***	.038	0.24
<i>Healthy lifestyle → Dropout intention</i>	-.204***	.042	0.26
<i>Coping strategies → Dropout intention</i>	.137***	.037	0.19

Note: * $p < .05$; ** $p < .01$; *** $p < .001$

Discussion

University dropout is a multifactorial phenomenon resulting from the interaction of multiple variables. The aim of this study was to analyse the relationship between coping strategies and healthy lifestyles and their impact on Spanish university students' dropout intention. The results confirmed all three initial hypotheses. First, the use of adaptive coping strategies was positively associated with a healthy lifestyle (H1), which is consistent with previous findings showing that adaptive coping and problem-focused approaches are associated with greater self-care and health-promoting behaviours (Bedoya, 2021). This suggests that students who apply adaptive mechanisms to academic stress are also more likely to maintain habits that promote physical well-being.

Second, healthy lifestyles were negatively associated with dropout intention (H2). These results are in line with recent studies highlighting how healthy habits such as proper nutrition, regular meals, sufficient sleep, and physical activity play a protective role against academic dropout (Suhlmann et al., 2018). This supports the idea that promoting healthy lifestyles could serve as an indirect strategy for reducing dropout intention and improving academic performance (Onetti-Onetti et al., 2019). Third, there was also a direct negative effect of adaptive coping strategies on dropout intention (H3). This finding supports theoretical models such as Lazarus & Folkman's (1984) transactional model of stress, showing that students who employ adaptive strategies not only regulate their emotions better but also perceive fewer threats that might lead them to consider leaving university.

However, one limitation of this study concerns the relatively small effect sizes and modest explained variance, particularly regarding dropout intention. Although the analysed variables showed statistically significant associations, many other contextual, personal, academic, and institutional factors are likely to influence students' withdrawal intentions. As Tinto (2005) suggested, dropout intention is a complex phenomenon that cannot be satisfactorily explained by a single set of variables. Additionally, data collection took place at the beginning of the academic semester, limiting the possibility of observing changes in coping strategies or lifestyle habits over time. Furthermore, the present study assessed dropout intention rather than actual dropout behaviour. Therefore, conclusions should be interpreted as referring to students' withdrawal intentions and not to observed university dropouts. Longitudinal research is needed to better understand how these variables evolve throughout students' university trajectories.

Another possible explanation for the low explained variance may be related to the students' field of study (Hatunoglu, 2020). For example, students in Health Sciences often exhibit clearer vocational motivations, better academic performance, and more deliberate career choices (Alonso-Rodríguez et al., 2020). This could moderate the effects of coping strategies and healthy lifestyles. Conversely, external pressure, lack of vocational clarity, and competitive environments might play a larger role in dropout intention in fields such as Engineering and Architecture. This suggests an interesting avenue for future research, comparing this model across different academic disciplines to examine whether the relative importance of the variables varies according to the specific dynamics of each field.

Another important limitation concerns the low reliability observed in the coping strategies measure. Although the CSI-sf has been validated in previous research, the internal consistency indices obtained in the present sample were lower than desirable. In addition, some observed indicators within the coping strategies construct (particularly EA4) showed weaker correlations with the remaining variables. Furthermore, some SEM models required residual correlations between observed indicators to achieve adequate fit. Although these re-specifications were theoretically justified, they suggest that certain dimensions of the coping construct may share variance not fully explained by the latent variable. Consequently, relationships involving coping strategies should be interpreted cautiously, and future studies should further examine the dimensional structure and psychometric performance of this instrument in university populations.

Finally, several methodological limitations should be acknowledged. The cross-sectional nature of the study prevents causal interpretations of the observed associations, while the use of self-report measures may have introduced response bias or social desirability effects. In addition, the sample was drawn from a single university, limiting the generalisability of the findings to other institutional or cultural contexts.

Overall, this study provides empirical evidence supporting and extending established theoretical frameworks on coping with stress, behavioural health, and academic retention. Firstly, the findings reinforce Lazarus & Folkman's (1984) transactional model by showing that adaptive coping strategies not only enhance emotional regulation but also directly reduce dropout intention. Secondly, the results contribute to the literature on dropout prevention by

demonstrating that psychosocial variables—such as healthy lifestyle habits—can serve as meaningful protective factors. However, the limitations of the model highlight the need to consider additional contextual and individual factors that influence the decision to continue at university or drop out.

From an applied perspective, the findings may have implications for the design of psychoeducational interventions in university settings. Specifically, the results suggest that promoting adaptive coping skills (such as cognitive restructuring, time management, and seeking social support) and healthy lifestyle habits may contribute to students' well-being and academic persistence. However, given the modest effect sizes observed and the reliability limitations of some measures, these implications should be interpreted cautiously. Therefore, the present findings should not be understood as definitive evidence for dropout prevention strategies, but rather as preliminary evidence supporting the potential relevance of psychosocial factors in students' university adjustment. Moreover, the findings suggest that such interventions may benefit from contextual adaptation, taking each academic discipline's specific characteristics into account. For instance, in fields characterized by high academic pressure or lower vocational clarity, more targeted approaches focused on career guidance and stress management may be required. This would allow for more effective, more responsive strategies that are sensitive to the specific needs of the student population and would contribute to a more equitable, sustainable educational policy (Parra et al., 2024). Future longitudinal and intervention-based studies are needed to better examine the extent to which strengthening coping strategies and healthy lifestyle habits may contribute to reducing dropout intention over time.

In light of the above, the present study provides empirical evidence supporting the relationship between adaptive coping strategies, healthy lifestyles, and academic dropout intention. The findings emphasise that students' personal resources—such as their ability to manage stress and maintain healthy habits—are key factors in preventing university dropout. Higher education institutions need to strengthen their psychoeducational support programs, promoting both development of healthy coping strategies and adoption of lifestyles that promote students' overall well-being and help them to stay in the educational system.

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