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The challenge of permanence in university students: a study on academic engagement and dropout intention

El reto de la permanencia en estudiantes universitarios: un estudio sobre engagement e intención de abandono académico

O desafio da permanência em estudantes universitários: um estudo sobre engagement e intenção de abandono académico

大学生学习持续性的挑战：基于学习投入度与辍学意向的研究

التحدي المتمثل في استمرار الطلاب الجامعيين في الدراسة: دراسة حول الالتزام والنية في التخلي عن الدراسة الأكاديمية

López-Aguilar, David ; Álvarez-Pérez, Pedro R. ; González-Benítez, Nicole ; Ramírez-Romero, Javier M.

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Abstract

In the context of higher education, the need to offer quality training and prevent the risk of dropping out of studies has been insisted upon, which implies reviewing all the elements involved in the student learning process. Engagement is one of the factors associated with the academic performance and well-being of students, so it is considered that there may be a close relationship with disengagement from studies. With the aim of analyzing the impact of academic engagement on the intention to drop out among undergraduate students, a quantitative study was conducted with 2,352 students from three Spanish universities. Participants were selected through stratified random sampling and completed a questionnaire on academic engagement, developed based on the Utrecht Work Engagement Scale (UWES). The results showed significant differences between the different dimensions of academic commitment (vigor, dedication and absorption) and the risk of dropping out. The students were classified into four groups according to the risk of dropping out and it was found that those with the lowest risk (Q1) obtained higher scores in the dimensions of engagement. The results suggest that academic commitment is key to permanence in undergraduate university studies, so strategies should be implemented to develop it and optimize the educational process of students.

Keywords: student Engagement, academic performance, student attrition, Higher Education

Resumen

En el contexto de la educación superior se viene insistiendo en la necesidad de ofrecer una formación de calidad y prevenir el riesgo de abandono de los estudios, lo que implica revisar todos los elementos que intervienen en el proceso de aprendizaje del alumnado. El engagement es uno de los factores asociados al desempeño académico y al bienestar de los estudiantes, por lo que se considera que puede haber una estrecha relación con la desvinculación de los estudios. Con la intención de analizar la incidencia del engagement académico en la intención de abandono en estudiantes de grado, se llevó a cabo una investigación de corte cuantitativo con 2352 estudiantes de tres universidades españolas, seleccionados a través de un muestreo aleatorio estratificado, que respondieron a un cuestionario sobre compromiso académico, elaborado a partir de la *Utrecht Work Engagement Scale*. Los resultados mostraron diferencias significativas entre las distintas dimensiones del compromiso académico (vigor, dedicación y absorción) y el riesgo de abandono. Los estudiantes se clasificaron en cuatro grupos según el riesgo de abandonar y se comprobó que los de menor riesgo (Q1) obtuvieron mayores puntuaciones en las dimensiones del engagement. Los resultados sugieren que el compromiso académico es clave en la permanencia en los estudios universitarios de grado, por lo que se deberían implementar estrategias para desarrollarlo y optimizar el proceso formativo del alumnado.

Palabras clave: participación de los estudiantes, rendimiento, abandono de estudios, universidad.

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Resumo

No contexto do ensino superior, tem-se insistido na necessidade de oferecer uma formação de qualidade e prevenir o risco de abandono dos estudos, o que implica a revisão de todos os elementos envolvidos no processo de aprendizagem dos estudantes. O engagement é um dos fatores associados ao desempenho académico e ao bem-estar dos estudantes, pelo que se considera que pode existir uma relação estreita com o desinteresse pelos estudos. Com a intenção de analisar o impacto do engagement académico na intenção de abandono em estudantes universitários, foi realizada uma investigação de corte quantitativo com 2352 estudantes de três universidades espanholas, selecionados através de uma amostragem aleatória estratificada, que responderam a um questionário sobre envolvimento académico, elaborado a partir da *Utrecht Work Engagement Scale*. Os resultados revelaram diferenças significativas entre as diferentes dimensões do empenho académico (vigor, dedicação e absorção) e o risco de abandono. Os estudantes foram classificados em quatro grupos, de acordo com o seu risco de abandono, e verificou-se que os de menor risco (Q1) obtiveram maiores pontuações nas dimensões do engagement. Os resultados sugerem que o empenho académico é fundamental para a permanência nos estudos universitários de graduação, pelo que devem ser implementadas estratégias para o desenvolver e otimizar o processo formativo dos estudantes.

Palavras-chave: participação dos estudantes, desempenho, abandono de estudos, universidade.

摘要

在高等教育背景下，提升教育质量并预防学生辍学风险已成为重要议题，这要求系统性审视影响学生学习过程的各项因素。学习投入度（engagement）被认为与学生的学业表现及其幸福感密切相关，因此可能与学业脱离现象存在紧密联系。本研究旨在分析本科生学业投入度对辍学意向的影响，采用定量研究设计，对西班牙三所大学的 2352 名学生进行分层随机抽样调查，所使用的学业投入度问卷基于 Utrecht 工作投入量表（UWES）编制。研究结果显示，学业投入度的不同维度（活力、奉献与专注）与辍学风险之间存在显著差异。根据辍学风险水平将学生分为四组后发现，辍学风险最低的学生群体在各投入度维度上得分最高。研究结果表明，学业投入度是促进大学本科生学习持续性的关键因素，因此有必要通过系统性策略加以培养，以优化学生的学习过程。

关键词: 学生参与；学业表现；辍学；大学教育。

ملخص

ي سياق التعليم العالي، يتم التشديد على ضرورة توفير تعليم عالي الجودة والوقاية من خطر التسرب من الدراسة، مما يستلزم مراجعة جميع العناصر التي تدخل في عملية تعلم الطلاب. يعد الالتزام أحد العوامل المرتبطة بالأداء الأكاديمي ورفاهية الطلاب، ولذلك يُعتبر أن هناك علاقة وثيقة بينه وبين التسرب من الدراسة. بهدف تحليل تأثير الالتزام الأكاديمي على نية التسرب لدى طلاب المرحلة الجامعية، أجريت دراسة كمية شملت 2352 طالبًا من ثلاث جامعات إسبانية، تم اختيارهم من خلال عينة عشوائية طبقية، وأجابوا على استبيان حول الالتزام الأكاديمي، تم إعداده استنادًا إلى مقياس التزام العمل في أوتريخت. أظهرت النتائج اختلافات كبيرة بين الأبعاد المختلفة للالتزام الأكاديمي (الحيوية والتفاني والانغماس) وخطر التسرب. تم تصنيف الطلاب إلى أربع مجموعات حصلوا على درجات أعلى في أبعاد الالتزام. تشير النتائج إلى (Q1) حسب خطر التسرب، وتبين أن الطلاب الأقل عرضة للخطر أن الالتزام الأكاديمي هو عامل أساسي في استمرار الدراسة الجامعية، لذا ينبغي تنفيذ استراتيجيات لتطويره وتحسين عملية تعليم الطلاب

الكلمات المفتاحية: مشاركة الطلاب، الأداء، التسرب من الدراسة، الجامعة

Introduction

We live in turbulent times, characterised by instability, conflict and change in all spheres of society. At this conjecture, individual lives are also affected, giving rise to complex situations that occasionally lead to undesirable and unsatisfactory decision making. The educational setting is not exempt from this reality. Students are continually subjected to personal and contextual situations that affect their wellbeing, compromise their academic goal achievement and demand skill mastery to rise above them. Without going much further, it is also important to mention the disorders derived from the recent crisis due to the global health pandemic, with the effects of this continuing to be felt in all settings and sectors of society.

In this way, it should be highlighted that a high number of individuals who access higher educations, for different reasons and realities, cease their studies shortly after starting (Aldahmashi et al., 2021; Delogu et al., 2024). This implies that universities are failing to meet one of the most important challenges of the 21st Century, in that students are not proving to be able to manage their training process and acquire the key competences that they need to insert themselves into society and the world of work. It cannot be forgotten that we currently live in a highly technological and specialised model of society. This model calls for highly qualified workers, with approximately 40% of jobs demanding higher studies. Thus, it follows that those students who leave university without finishing their studies will find insertion in the job market more difficult, given that job opportunities are reduced by a lack of lifelong training (Behr et al., 2020; Morentin-Encina, 2021; Kocsis & Molnár, 2024). Nonetheless, abandoning one's studies also has other consequences, which not only impact the students themselves, but also their families and higher education institutions, whose investment of public resources into producing competent and qualified professionals does not appear to be money well spent (Pusztai, 2019; Guzmán & Barragán, 2022; Rahmani et al., 2024).

International bodies such as the OECD (2020) have shown interest in this topic for a number of years now, given the number of young people who leave their studies each year prior to finishing. Previous work (Álvarez-Pérez et al., 2021b) revealed that more that 30% of students who were enrolled on university courses reported the intention to drop out of their studies. A report disseminated by the Ministry of Universities (2022) on university academic performance indicators (pertaining to the 2022/2023 academic year), gathered data on dropout rates in all Spanish regions, with the Canary Islands (19.1%) and Balearic Islands (16.8%) having the highest rates out of all participating universities. Dropout is not a problem only in Spain but is, indeed, an international phenomenon. Countries such as Australia and the United States are affected by this issue each year (Rumberger & Lin, 2008) and, in many Latin American countries, dropout rates are alarmingly high (Sepúlveda & Opazo, 2016; Castro-Martínez & Machuca-Téllez, 2023).

For this reason, research into university dropout has become one of the main focuses of attention when it comes to research in the educational field, with the aim of determining the factors associated with it and design solutions to address it (Christie & Munro, 2018; Bernardo et al., 2022). Amongst the main conclusions reached on the issue, it is highlighted that academic dropout cannot be explained or predicted by any one single variables, nor by a specific set of variables. Instead, it concerns a complex multifactorial phenomenon, upon which diverse perspectives and variables that are personal, academic, economic and contextual in nature are hinged (Tinto, 1993; 2020; Sosa-Alonso et al., 2025). Dropout could be considered to be an individual decision, which is affected by contextual factors that may have diverse short-, medium- and long-term implications (Dynarski & Scott-Clayton, 2013).

No consensus exists regarding whether the contextual or personal variables have greater weight at the time of explaining dropout. With regards to the importance of contextual

variables, Loes et al. (2024) found that factors such as the type of institution, student-teacher ratio and social climate in the classroom may influence the decision taken by students to stop their studies. Bettinger et al. (2012) have considered the relationship of dropout with variables such as characteristics of the educational institutional, the student's immediate social and family environment, educational policies, and socioeconomic status. With regards to personal factors, Robbins and Fredricks (2012) highlight that intrinsic motivation, goal motivation and self-efficacy are important factors for student persistence pertaining to their studies. Awadalla et al. (2024) found that anxiety and depression can negatively affect academic performance and increase dropout risk. Cobo-Rendón et al. (2022) evaluated the predictive capacity of engagement in terms of student adaptation to university life. Valero-Ancco et al. (2024) propose that enrolment at university tends to lead to emotional problems and stress in young people and, consequently, recommend the development of coping capacity in young people with a positive attitude towards their studies.

There is, therefore, an accepted consensus that dropout should be linked more to broader constructs than to specific variables. One such macro-construct found to be related with dropout is seen in the shape of commitment or engagement (Schaufeli & Baker, 2003; Martos et al., 2018; Marôco et al., 2019). From a broad, structural and multidimensional perspective of engagement, that proposed by Fredricks et al. (2004) stands out. This framework describes engagement according to three main dimensions. The first dimension is positive student attitude towards academic activities, followed, secondly, by intrinsic motivation and, finally, the use of self-regulatory and motivational strategies to manage academic work. According to Schaufeli et al. (2002a), engagement is a persistent state that integrates cognitive and affective factors. Medrano et al. (2015) considers that an "*engages*" students possesses high levels of activation towards work and academic performance. Salanova et al. (2005a) see engagement as a positive psychological state of wellbeing, which is manifested through active involvement, motivation and the interest shown by the student in their training. Further, Merino (2024) links engagement to academic motivation and positive life aspects. Truta et al. (2018) propose three dimensions to consider when addressing student academic commitment: the cognitive dimension (interest in learning and understanding), the affective dimension (positive feelings towards their studies) and the behavioural dimension (active participation in the classroom and academic activities). In this way, when considering these variables, academic commitment is manifested in students who are applied, participative, active, invested and diligent and who have a keen sense of achievement orientation (Durán et al., 2004; Cavazos & Encinas, 2016; Cajas et., 2020; Sarmiento et al., 2023). As outlined by King et al. (2015) and Álvarez-Pérez et al. (2021a), students with high engagement levels continuously set themselves new challenges, show initiative, see themselves as being capable of tackling the new demands brought about by the learning process, and hold an strong bond with their academic work. Such traits can promote success along their training path.

In terms of research into this construct, one of the most evidenced and used theoretical models is that proposed by Salanova et al. (2005b), in which engagement is conceptualised around three core dimensions. The first dimension, vigour, pertains to one's energy, vitality and disposition towards investing effort into academic work. This includes the energy and mental resistance of the individual throughout task performance and, even, their persistence when performing a task despite obstacles. Vigour refers to the desire to invest effort into the activity that is being performed and the enthusiasm towards studying. Secondly, dedication is characterised by being highly motivated and engaged and being an active participant in the task. Students with high dedication identify strongly with their studies and consider them to be important

and worthwhile, enabling them to take on challenges in their academic work with enthusiasm. The third dimension is absorption and refers to being totally concentrated and deeply absorbed in academic work. This means that time passes quickly and participants do not find it difficult to stay connected, without downtime, whilst performing a task. Absorbed students feel immersed in their studies and lose all notion of time. They approach feelings with enthusiasm, pride, inspiration and hunger for a challenge, etc. In summary, this model suggests that academic commitment is a protective factor against study dropout. Students who experience high levels of vigour, dedication and absorption with regards to their studies are more likely to stay at university and complete their studies. In contrast, those who experience low levels of academic commitment may feel demotivated and disinterested in relation to their studies, which increases their risk of university dropout (Schaufeli et al., 2002; Carmona-Halty et al., 2017).

Given that academic engagement has been shown to be a core construct for promoting learning, interest, wellbeing and persistence, the aim of the present research was to evaluate the relationship between academic engagement and the intention to dropout in university degree students. More specifically, the proposed aim was to analyse the influence of vigour, absorption and dedication on dropout intention. The study hypothesis was that students who are more committed to their learning process will have a lower risk of failure and of detaching from their academic training.

Method

In order to address the aim of the present work, a quantitative ex-post-facto study was conducted, in which no variables were manipulate and analysis was purely observations of the relationships between them.

Participants

The target population in the present study pertained to students who were enrolled on university degree courses. Specifically, participating students were enrolled on such courses during the 2023/2024 academic year at the Spanish universities of Huelva (UHU), La Laguna (ULL) and Zaragoza (UNIZAR). The study population was divided into four groups (Q1, Q2, Q3 and Q4). The group of students belonging to Q1 were those at the lowest risk of dropout, whilst those in Q4 were the most likely to abandon their studies. This grouping according to four categories was based on previously conducted work within the framework of the project titled "*Análisis de los factores explicativos del abandono de los estudios universitarios y acciones estratégicas para su mejora y prevención [Analysis of explanatory factors of dropout from university studies and strategic actions for improvement and prevention*" (reference: PID2020-114849RB-I00). In the preliminary stage of this project, an explanatory model was constructed via data mining processes. This model was elaborated based on a sample of 150018 university degree students who definitively abandoned the course on which they were enrolled, in the period between 2010 and 2018, at the aforementioned Spanish universities (González-Morales et al., 2025). The trained model was applied in a second stage of the project with students who were undertaking university degree studies during the 2023/2024 academic year, which enabled the degree of dropout to be differentiated according to the four identified groupings.

With the aim of recruiting a representative sample of the target population, proportionally weighted random stratified sampling was performed. This sampling approach divides the population into subgroups or strata that share certain characteristics and exhibit high internal homogeneity. A proportional weighting process was followed in accordance with the populational distribution size of each stratum. Participants within each stratum were selected randomly.

Sampling was performed within each of the individual participating universities. This type of sampling was employed to boost statistical precision, in comparison with other methods such as simple randomisation. Table 1 presents data on the study population, estimated stratified sample and the sample that was ultimately recruited for study purposes. The target stratified sample was calculated based on a 95% confidence level and ±5% margin of error.

Table 1. Population and sample according to participating university

UHU	Population	7601
	Estimated stratified sample	368
	Obtained sample	310
ULL	Population	13202
	Estimated stratified sample	376
	Muestra obtenida	964
UNIZAR	Population	25062
	Estimated stratified sample	380
	Obtained sample	1078

Generally speaking, a total of 2352 students participated. Following data cleaning processes, the final sample was made up of 2292 students. During data cleaning, participants for who data was missing were removed. This preliminary step led to the identification of 22 individuals whose data were eliminated from the database. Likewise, with the aim of identifying atypical multivariate cases, Mahalanobis' distance statistic was estimated. This produced a cut point based on which extreme outliers could be detected (Muñoz & Amón, 2013). Specifically, this distance estimate was 41.337, which led to the elimination of 38 atypical cases. General characteristics of the participating sample are presented in table 2.

Table 2. General participant characteristics

Age	$\bar{x}$ =25.31; sd=7.375
Gender	Male: 36.0% (n=825) Femae: 62.9% (n=1442) Other: 1.1% (n=25)
Dropout risk	Q1: 24.6% (n=564) Q2: 26.2% (n=600) Q3: 28.9% (n=663) Q4: 20.3% (n=465)
University	University of Huelva: 13.0% (n=298) University of La Laguna: 41.1% (n=941) University of Zaragoza: 45.9% (n=1053)
Knowledge branch	Arts and Humanities: 1.5% (n=263) Sciences 9.5% (n=218) Health Sciences: 117.4% (n=398) Social and Legal Sciences: 41.3% (n=947) Engineering and Architecture: 20.3% (n=466)
Academic year	First: 11.1% (n=255) Second: 25.3% (n=581) Third: 24.5% (n=561) Fourth: 31.7% (n=727) Fifth: 4.5% (n=102) Sixth: 2.9% (n=66)
Academic performance	Fail: 5.1% (n=118) Pass: 37.2% (n=852) Merit: 51.8% (n=1187) Distinction: 5.1% (n=117) Honours: .8% (n=18)

Data collection instrument

The data collection process employed an *ad hoc* questionnaire that included the *Utrecht Work Engagement Scale*, whose psychometric properties (χ^2; CFI; RMSEA; GFI, AGFI, NFI, NNFI and TLI) meet critical values established by previous relevant literature and can be consulted in the paper published by Schaufeli et al. (2002b). This scale measures academic commitment and is composed of 17 items that are rated along a 7-point Likert scale (where 1 is the lowest rating and 7 the highest). Items are distributed according to three variables (vigour, dedication and absorption). Specifically, table 3 presents scale items, with their respective coding, organised according to the variable to which they belong.

Further, sociodemographic information was included on the data collection instrument that was related with the sample (gender, date of birth, university, degree course, academic year and academic performance). With regards to the types of measures employed to gather relevant data, open questions with multiple response choices were employed.

Table 3. Academic commitment scale

Variables	Items	Cod.
Vigour	When I perform coursework tasks, I feel strong and full of energy	ca1
	When I get up in the morning, I feel like going to class, studying or doing coursework	ca2
	I can remain studying continuously for long periods of time (without getting exhausted)	ca3
	I consider myself to be a consistent and persistent person when tackling coursework tasks	ca4
	Even if I do not feel well, I do not stop doing my coursework	ca5
	I feel strong and motivated when I am doing classroom activities	ca6
Dedication	The course I am studying makes sense to me	ca7
	I am enthusiastic about the university studies I am undertaking	ca8
	The studies I am undertaking motivate me to do new things related with the training that I am doing	ca9
	I am proud to be undertaking a university degree course	ca10
	Undertaking university studies is an important challenge for me	ca11
Absorption	Time flies by when I do coursework tasks	ca12
	I forget about everything that is going on around me when I am concentrating on my studies	ca13
	I feel happy when I am doing coursework tasks	ca14
	I am engaged and immersed in the studies that I am undertaking	ca15
	When I do coursework tasks, I am so engaged that time flies by	ca16
	I find it difficult to stop doing coursework tasks	ca17

As a preliminary step to the final application of the study questionnaire, different versions were designed that derived from dialogue and evaluations provided by the 25 researchers who participated on the project discussed above. These included experts on education research methodology and specialists working in the field of interest. Thus, in accordance with that proposed by McMillan and Schumacher (2005), a process was performed through which instruments were defined based on expert judgement and form. In this way, greater reliability and validity was achieved.

Given that the measurement scale employed met assumptions pertaining to tau-equivalence, one-dimensionality and continuity (Raykov & Marcoulides, 2017), Cronbach alphas were calculated. In the same way, McDonald coefficients were also calculated due to the greater efficacy and robustness achieved (Viladrich et al., 2017). In agreement with the information presented in table 4, the scores achieved for both coefficients exceeded the critical values established in relevant existing literature (Taber, 2018).

Table 4. Reliability indices for the measurement scale employed

Variables	Cronbach alpha	McDonald omega
Vigourr	.85	.93
Dedication	.91	.93
Absorption	.89	.92
Total	.94	.96

Average variance extracted (AVE) values were located above the cut points established by previously conducted literature: >.5 (Shersta, 2021).

Procedure and issues pertaining to ethics and methodological rigour

Given that the study was targeted towards different student groups (Q1, Q2, Q3 and Q4), four databases were elaborated with each being linked to a single questionnaire. The first database was designed to gather information related with students characterised as low dropout risk (Q1), whilst the second was oriented towards students with moderate risk (Q2). Next, the third corresponded to people with high dropout risk (Q3), whilst the final database gathered all individuals at extreme dropout risk (Q4).

As a final step prior to study roll out, the Ethics Committee for Research into Animal Wellbeing (CEIBA) based at the University of La Laguna was contacted to ensure that the work complied with ethical procedure and data protection. This ethics committee returned a favourable outcome, which is filed under the reference number CEIBA2021-3079. To ensure adequate data handling, contact was made with the Data Protection Office and the University of La Laguna. This service provided the following forms, which were employed over the course of the study:

- Informed consent, which was included within the administered questionnaire.
- Confidentiality agreement signed by all participating study researchers.

This procedure guaranteed that study participation was voluntary, ensured response anonymity and established a code of ethics and research ethics. These measures align with that proposed by Corbella et al. (2021), who emphasise the importance of ethical commitment in research, as a means of guaranteeing transparency and responsibility in terms of data management.

After completion of these preliminary steps, the data collection instrument was administered. For this, the target population was contacted via their institutional electronic email address which was provided by participating universities. The questionnaire was adapted to the Google Forms platform in order to conduct data collection processes online. Data collection took place between February and April 2024.

Data analysis and interpretation

The final step of data collection was to download all generated databases in .CSV (comma-separated-values) format. The different databases were combined into a single file in which each individual datapoint was identified with the quartile to which students belonged. Statistical analysis was performed to address study aims with all tests being run using the *R-Studio* software. Specifically, this data tool was used to identify potential missing data, detect multivariate atypical cases, perform central tendency measures, analyse data distribution, assess internal consistency and reliability of the employed measurement scale, and perform comparative analysis. The α value outcome was .05. Alongside this tool, the Gephi software was used in its version 0.10.1 in order to visually present graphically illustrated differences.

Further, with the aim of meeting recommendations laid out by the *American Psychological Association* (APA), observed differences were calculated through the Kruskal-Wallis H test and complemented with the corresponding effect size. These estimates were made using the program Microsoft Excel. These calculations were made based on the epsilon squared coefficient (E_R^2), which is mathematically expressed as follows:

$$E_R^2 = \frac{H}{(n^2 - 1)/(n + 1)}$$

Observed differences were interpreted in line with values proposed by Tomczak and Tomczak (2014).

Results

Data cleaning and preliminary analysis

The first steps that was performed as a preliminary stage prior to comparative analysis was data cleaning. In this sense, it was confirmed that the scores obtained from the questionnaire administered to the target population were located within the expected range. Other aspects that were reviewed, as already alluded to, included the detection and removal of missing cases, as well as the identification of outliers based on Mahalanobis distance estimates.

Further, multicollinearity was assessed to identify highly correlated variables which, for this reason, could be considered to be redundant. This procedure was performed by calculating inter-item bivariate correlations for all questionnaire items. In this case, for all cases, the r value cut-point was set at .85 (Cupani, 2012).

Table 5. Central tendency measures for the academic commitment scale

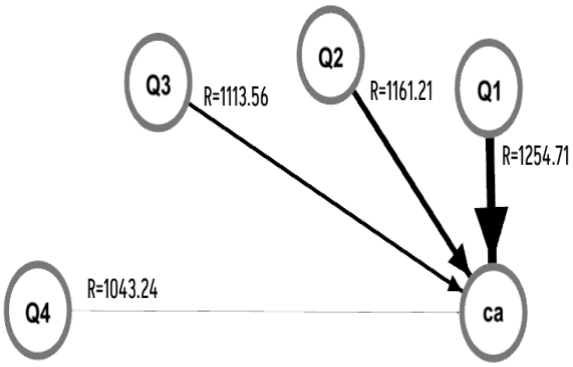
Ítem	$\bar{x}$	sd
ca1	3.76	1.644
ca2	3.20	1.707
ca3	3.51	1.798
ca4	4.66	1.742
ca5	4.30	1.901
ca6	3.94	1.719
ca7	5.33	1.702
ca8	4.71	1.878
ca9	4.63	1.873
ca9	4.63	1.873
ca10	5.38	1.803
ca11	5.35	1.695
ca12	3.65	1.831
ca13	3.85	1.856
ca14	3.33	1.674
ca15	4.51	1.750
ca16	3.61	1.823
ca17	3.40	1.907

Finally, as a means of selecting the type of analysis to perform in order to address study aims, data distribution was analysed. Specifically, Shapiro Wilks and Kolmogorov-Smirnov tests were performed, both of which produced values of p<.001 for all cases. In accordance with George and Mallery (2001), this indicates a non-normal data distribution. For this reason, it was decided to employ non-parametric comparative testing in the form of the Kruskal-Wallis H. Central tendency analysis of the measurement scale employed is presented in table 5.

Academic commitment

In general terms, comparative analysis revealed that students with lower risk of dropout (Q1) reported having higher levels of academic commitment (R=1254.71; H=28.342; p<.000; E_R^2=.012). This can be seen in the graph presented in figure 1, in which it is depicted that students belonging to the highest dropout risk group (Q4) also reported lower scores on the academic commitment scale.

Figure 1. Graph illustrating the differences identified between dropout groups for academic commitment



Vigour variable

With regards to the vigour variable, significant differences (p≤.05) were detected according to the dropout risk assigned to the student (figure 2). In general, group Q1 exhibited the highest values (R=1265.35; H=38.431; p>.000; E_R^2=.017) for the vigour variable, whilst group Q4 reported the lowest scores.

Figure 2. Graph illustrating the differences identified between dropout groups for the vigour variable

Specifically, significant differences were identified for all items corresponding to the vigour variable with exception of "ca1" (p=.052) and "ca6" (p= .095). Concretely, as shown in table 6, students with the lowest dropout risk (Q1) were also characterised by reporting a stronger predisposition towards attending class, studying and performing academic tasks (R=1202.15; H= 8.072; p= .045; E_R^2= .004), studying for long periods of time without exhaustion (R=1259.52; H=31.161; p>.001; E_R^2 =.014) and being consistent and persistent when performing academic tasks (R=1277.81; H=53.412; p> .001; E_R^2= .023) even when they feel unwell (R= 1273.36; H= 44.031; p> .001; E_R^2= .019).

Table 6. Comparative analysis of items pertaining to the vigour variable

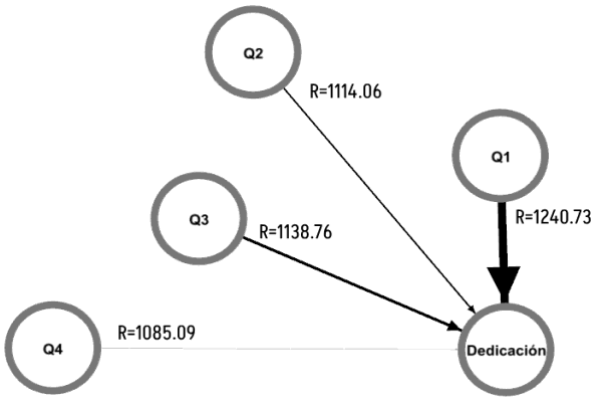
	G	n	MR	H	p	E_R^2		G	n	MR	H	p	E_R^2
ca1	Q1	564	1197.06	7.716	.052		ca4	Q1	564	1277.81	7.716	.000	.023
	Q2	600	1159.49					Q2	600	1178.44			
	Q3	663	1133.11					Q3	663	1117.90			
	Q4	465	1087.51					Q4	465	986.79			
ca2	Q1	564	1202.15	8.072	.045	.004	ca5	Q1	564	1273.36	8.072	.000	.019
	Q2	600	1163.11					Q2	600	1165.48			
	Q3	663	1109.95					Q3	663	1119.28			
	Q4	465	1109.69					Q4	465	1006.95			
ca3	Q1	564	1259.52	31.161	.000	.014	ca6	Q1	564	1193.60	31.161	.095	
	Q2	600	1170.43					Q2	600	1164.11			
	Q3	663	1091.96					Q3	663	1119.17			
	Q4	465	1056.32					Q4	465	1105.61			

Note: G, Groups; RP, Mean Range.

Dedication variable

In line with the data presented in figure 3, findings were similar for the dedication variable. Specifically, it was identified, generally speaking, that students belonging to the lowest dropout risk group (Q1) also reported the highest dedication scores (R= 1240.73; H= 317.015; p= .001; E_R^2=.138).

Figure 3. Graph illustrating the differences identified between dropout groups for the dedication variable



Comparative analysis uncovered statistically significant differences for all items comprised by this variable (p≤.05), with the only exception of item ca11 (table 7). In more detail, the group with the lowest dropout risk (Q1) also reported more positive scores in terms of that their studies made sense to them (R=1231.31; H=16.048; p=.001; E_R^2 =.007), they were motivated about the training they were undertaking (R=1240.92; H=16.672; p=.001; E_R^2=.007) and they felt proud about undertaking a university degree (R=1226.14; H=16.928; p=.001; E_R^2=.007).

Tabla 7. Análisis de contraste de los ítems incluidos en la variable dedicación

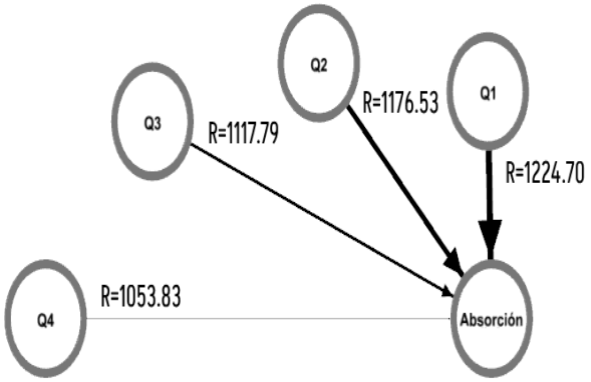
	G	n	MR	H	p	E_R^2		G	n	MR	H	p	E_R^2
ca7	Q1	564	1231.31	16.048	.001	.007	ca10	Q1	564	1226.14	16.928	.001	.007
	Q2	600	1138.79					Q2	600	1113.06			
	Q3	663	1131.77					Q3	663	1160.56			
	Q4	465	1074.59					Q4	465	1073.02			
ca8	Q1	564	1240.92	16.672	.001	.007	ca11	Q1	564	1123.52	3.604	.307	
	Q2	600	1124.61					Q2	600	1119.55			
	Q3	663	1125.74					Q3	663	1171.12			
	Q4	465	1089.83					Q4	465	1174.05			
ca9	Q1	564	1282.67	34.861	.000	.015							
	Q2	600	1109.07										
	Q3	663	1122.45										
	Q4	465	1063.93										

Note: G, Groups; RP, Mean Range.

Absorption variable

Finally, the absorption variable also revealed differences that favoured the group of students with the lowest dropout risk (R=1224.70; H=19.499; p<.000; E_R^2=.009). In this way, students with higher absorption scores tended to belong to the group of individuals characterised by the lowest dropout. Figure 4 illustrates the general differences observed for this variable.

Figure 4. Graph illustrating the differences identified between dropout group for the absorption variable



With the exception of items ca12 and ca16, statistically significant differences were found (p≤.05). These differences favoured the group of students with the lowest dropout risk (Q1). Specifically, as can be observed from table 8, this group of students was characterised by being highly engaged in their studies (R=1255.49; H=42.868; p<.000; E_R^2 =.019), finding it difficult to stop doing coursework tasks (R=1223.22; H=21.685; p<.000; E_R^2 =.009) and being highly concentrated on their training process (R=1206.81; H=9.840; p<.020; E_R^2=.004).

In terms of the effect sizes pertaining to the observed differences, it was observed that, generally speaking, the magnitude of effects was small in line with that proposed by Tomczak and Tomczak (2014).

Table 8. Comparative analysis of the items included in the absorption variable

	G	n	MR	H	p	E_R^2		G	n	MR	H	p	E_R^2
ca12	Q1	564	1183.91	5.164	.160		ca15	Q1	564	1255.49	42.868	.000	.019
	Q2	600	1169.24					Q2	600	1172.59			
	Q3	663	1120.62					Q3	663	1138.59			
	Q4	465	1108.69					Q4	465	991.92			
ca13	Q1	564	1206.81	9.840	.020	.004	ca16	Q1	564	1184.88	7.241	.065	
	Q2	600	1157.86					Q2	600	1178.87			
	Q3	663	1129.72					Q3	663	1119.46			
	Q4	465	1082.62					Q4	465	1096.74			
ca14	Q1	564	1209.23	8.544	.036	.004	ca17	Q1		1223.22	21.685	.000	.009
	Q2	600	1153.32					Q2		1174.63			
	Q3	663	1110.05					Q3		1130.57			
	Q4	465	1113.60					Q4		1039.87			

Note: G, Groups; RP, Mean Range

Discussion and conclusions

The main aim of the present work was to conduct an in depth assessment of the relationship between academic engagement and dropout intentions in university degree students. Specifically, the effect was analysed of different dimensions of engagement on university dropout intention. To this end, analysis was framed by the approach to academic engagement proposed by Salanova et al. (2002a). This framework was chosen as it provides a relevant model that has previously been employed as a reference in many studies that have examined the three main dimensions in detail: vigour (behavioural dimension), dedication (emotional dimension) and absorption (cognitive dimension).

Generally speaking, present findings reveal an inverse association between the two main study variables of dropout and engagement. In this sense, participants who exhibited greater engagement, also had the lowest dropout risk out of the four student groupings. Regarding all of the variables that were considered when evaluating academic commitment (vigour, dedication and absorption), participants in group Q1 (who were characterised by the lowest dropout risk) reported higher ratings in comparison to Q4 participants who had the highest risk of abandoning their studies. Thus, the main study conclusion is that students with the lowest dropout risk scored more highly in terms of all variables that characterise academic engagement.

These findings coincide with those reported in previous research that uncovered a similar relationship between these two factors, thereby demonstrating the high predictive and explanatory power of engagement on university dropout. In work published by Wang and Fredricks (2014), lower behavioural and emotional engagement, alongside a greater number of problematic behaviours were found to predict higher school dropout risk. A study conducted by Marôco et al. (2019) found commitment to act as a mediator between perceived social support and dropout. Variables that are social in nature, such as getting on well with classmates or maintaining good relationships with teachers, are influential at the time of deciding whether or not to continue with university studies. This highlights the importance of academic commitment as a protective factor against academic dropout and, therefore, a driver of permanence. The link between engagement and other variables such as self-efficacy has been highlighted in previous research studies, such as those conducted by Schunk and Di Benedetto (2021), where it was emphasised that self-efficacy influences student motivation, effort and permanence. All of these elements are key to academic engagement. Students with high self-efficacy are more likely to actively involve themselves in their learning, set challenging goals and persevere in the face of challenges.

Committed students are more motivated, more persistent and enjoy their learning to a greater extent, thereby reducing the likelihood of them leaving their studies. Outcomes obtained in the present research, verified through comparative analysis, illustrate the profile of a university student who is highly engaged in their studies and at low risk of abandoning their training. Such students are characterised by being motivated by personal development, feeling proud about undertaking university studies, attending lectures, being focused and concentrated on coursework, being constant and persistent when performing academic tasks, and not getting exhausted by academic work, even following long periods of study engagement.

The present research has important practical implications that are crucial for dissemination. This is reflected in the fact that it confirms the predictive value of academic commitment, whilst, at the same time, it identifies highly significant variables that both lie at the heart of student performance and reduce dropout risk. As highlighted by other authors (Oporto et al. 2022; Galve-González et al. 2024), concordance exists between the daily work put in by students, academic performance and study dropout. In the case of identifying students with low levels of engagement and high dropout risk, different approaches should

be taken to promote active participation, collaboration between students and the building of positive relationships that reduce dropout risk (Zepke & Leach, 2010; Denovan et al., 2020; Gustems et al., 2024).

When students are motivated, engaged in their learning process, set achievement goals, etc., they are at lower risk of failure and dropout. From this perspective, academic engagement integrates a series of drivers of the learning process, which impact longevity and academic success. Such drivers include motivation, interest, expectations, effort, persistence, etc. In this sense, the University of La Laguna is currently overseeing a Guidance and Tutoring Action Plan (Plan de Orientación y Acción Tutorial, POAT) that is based on career guidance and mentoring with students, which, amongst other objectives, strives to support students to integrate into university life and manage their learning process (Álvarez-Pérez & López-Aguilar, 2023).

As main conclusions of the present research, it serves to highlight the following:

1. In accordance with obtained outcomes, greater academic engagement was found to be related with a lower likelihood of students thinking about ceasing the university studies that they are undertaking.
2. Academic engagement, structured according to the dimensions of vigour, dedication and absorption, acts as a protective element that favours permanence and reduces dropout risk. In other words, vigour, dedication and absorption are significantly associated with lower dropout risk.
3. Students characterised by a lower dropout risk (Q1) reported higher ratings for all dimensions of engagement when compared with students at the highest risk of dropout (Q4)
4. Previous conclusions reiterate the robustness of the observed relationship, which is that greater academic engagement leads to reduced dropout intention in university students.

Present study findings reinforce the aforementioned general conclusions, as they provide empirical evidence that academic engagement constitutes a determining factor of permanence in relation to university studies. Present conclusions are justified by the results in that observed outcomes pertaining to all assessed dimensions (vigour, dedication and absorption) translate into behaviours that reflect engagement, academic resilience and satisfaction with the formative process. Such characteristics are directly associated with a reduced dropout intention, which reinforces the idea that engagement offers a mechanism through which academic dropout can be avoided.

A series of limitations should be acknowledged in the present work that must be considered to future studies. Firstly, whilst the sample is representative of the target population, present findings cannot be generalised to the wider spectrum of Spanish universities, due to the fact that they reflect the reality of three specific higher education institutions. Another aspect that should be considered is that a self-report data collection instrument was administered which, despite meeting established psychometric standards, is open to response bias due to social desirability, item interpretation, etc. Findings would also be enhanced through a longitudinal research design that analyses the status of student commitment a different timepoints throughout their training path, whilst also relating it with other variables of interest. Finally, it serves to mention that the present work took a quantitative approach towards addressing pre-established objectives. Nonetheless, looking towards the future, it would be useful to accentuate the present work through an approach that is mixed and complementary in nature, with the aim of gathering accounts of individuals who actually live and experience, in first person, the examined reality.

The present work opens the door to conducting future research, overseeing institutional programs and designing educational policies. In the research setting, longitudinal studies are required to enable a

more in depth assessment of the evolution of student commitment throughout their academic trajectory. From a practical viewpoint, present research highlights the need to implement institutional programs and strategies targeted towards driving student motivation, active participation and the building of student-teacher relationships. This can be achieved through the roll out of peer mentoring and guidance programs, collaborative activities and personalised follow-up plans. With regards to educational policies, present study findings suggest that it is important to encourage the promotion of initiatives that reinforce academic engagement as a mechanism that contributes towards tackling dropout. To this end, it is necessary to design mechanisms that incorporate engagement indicators in assessment processes, in such a way that enables identification, as early as possible, of students who are at a high risk of dropout and, subsequently, activate early interventions to boost at-risk students' engagement with their academic tasks, as a means of improving permanence and achieving academic success. Finally, it would be useful for future research to conduct more in depth assessment of the contextual and personal factors that shape this relationship, incorporating longitudinal methodologies that enable a better understanding of the evolution of *engagement* throughout the university pathway.

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References

Aldahmashi, T., Algholaiqa, T., Alrajhi, Z., Thamer Althunayan, T., Irfan Anjum, I., & Bader Almuqbil, B. (2021). A case-control study on personal and academic determinants of dropout among health profession students. *Higher Education Studies, 11*(2), 120–126. https://doi.org/10.5539/hes.v11n2p120

Álvarez-Pérez, P.-R., López-Aguilar, D., & Valladares-Hernández, R.-A. (2021a). La influencia del «engagement» en las trayectorias formativas de los estudiantes de Bachillerato. *Estudios Sobre Educación*, *40*, 27-50. https://doi.org/10.15581/004.40.27-50

Álvarez-Pérez, P.R., López-Aguilar, D., González-Morales, O.M., y Peña-Vázquez, R. (2021b). Academic engagement and dropout intention in undergraduate university students. J*ournal of College Student Retention: Research, Theory & Practice, 26* (1), 108-125. https://doi.org/10.1177/1521025121 1063611

Álvarez-Pérez, P.R., & López-Aguilar, D. (2023). Tutoría y proyecto formativo del alumnado universitario: la importancia de comenzar bien. *Revista Brasileira de Orientação Profissional, 23*(2), 127-137 https://doi.org/10.26707/1984-7270/2022v23n0202

Awadalla, S., Bethan, E., & Galzebrook, C. (2024). The Impact of Depressive and Anxiety Symptoms on Academic Achievement among Undergraduate University Students: A Systematic Review. *OBM Neurobiology, 8*(4), 261. http://dx.doi.org/10.21926/obm.neurobiol .2404261

Behr, A., Giese, M., Teguim Kamdjou, H. D., & Theune, K. (2020). Dropping out of university: A literature review. *Review of Education*, *8*(2), 614–652. https://doi.org/10.1002/rev3.3202

Bernardo, A.B., Galve-González, C., Núñez, J.C., & Almeida, L.S. (2022). A Path Model of University Dropout Predictors: The Role of Satisfaction, the Use of Self-Regulation Learning Strategies and Students' Engagement. *Sustainability*, *14,* 1057. https://doi.org/10.3390/su14031057

Bettinger, E. P., Long, B. T., Oreopoulos, P., & Sanbonmatsu, L. (2012). The role of application assistance and information in college decisions: Results from the H&R Block FAFSA experiment. *The Quarterly*

Journal of Economics, *127*(3), 1205-1242. https://doi.org/10.1093/qje/qjs017

Cajas, V., Paredes, M. A., Pasquel, L., & Pasquel, A. F. (2020). Habilidades sociales en Engagement y desempeño académico en estudiantes universitarios. *Comuni@cción: Revista De Investigación En Comunicación Y Desarrollo*, *11*(1), 77-88. https://doi.org/10.33595/2226-1478.11.1.405

Carmona-Halty, M., Schaufeli, W., & Salanova, M. (2017). The Utrecht Work Engagement Scale for Students (UWES–9S): Factorial Validity, Reliability, and Measurement Invariance in a Chilean Sample of Undergraduate University Students. *Frontiers in Psychology, 10*, 1-5. https://dx.doi.org/10.3389%2Ffpsyg.2019.01017

Castro-Martínez, J., & Machuca-Téllez, G. (2023). La deserción universitaria en América Latina: una perspectiva ecológica. *Estudios Pedagógicos (Valdivia)*, *49*(2), 87-108. https://dx.doi.org/10.4067/S0718-07052023000200087

Cavazos, J., & Encinas, F. C. (2016). Influencia del engagement académico en la lealtad de estudiantes de posgrado: un abordaje a través de un modelo de ecuaciones estructurales. *Estudios Gerenciales*, *32*(140), 228-238. https://doi.org/10.1016/j.estger.2016.07.001

Christie, A. L., & Munro, M. (2018). *Supporting student success: A comprehensive guide to retention and completion strategies*. Sterling, VA: Stylus Publishing.

Cobo-Rendón, R., López-Angulo, Y., Sáez-Delgado, F., & Mella-Norambuena, J. (2022). Engagement, motivación académica y ajuste de estudiantado universitario. *Revista Electrónica Educare*, *26*(3), 256-274. https://dx.doi.org/10.15359/ree.26-3.15

Corbella, L., Sanz, C., & Arnau, L. (2021). La formación del compromiso ético en investigación educativa: resultados de una experiencia de innovación docente en educación superior. *INNOVA Research Journal, 6*(3), 135-154. https://doi.org/10.33890/innova.v6.n3.2021.1772

Cupani, M. (2012). Análisis de ecuaciones estructurales: conceptos, etapas de desarrollo y un ejemplo de aplicación. *Revista Tesis, 1*,186-199. https://repositoriosdigitales.mincyt.gob.ar/vufind/Record/RDUUNC_298969260e96d35bba7fa8351c7e7193

Delogu, M., Lagravinese, R., Paolini, D & Resce, G. (2024). Predicting dropout from higher education: Evidence from Italy. *Economic Modelling*, *130,* 1-15 https://doi.org/10.1016/j.econmod.2023.106583

Denovan, A., Dagnall, N., Macaskill, A., & Papageorgiou, K. (2020). Future time perspective, positive emotions and student engagement: a longitudinal study. *Studies in Higher Education*, *45*(7), 1533-1546. https://doi.org/10.1080/03075079.2019.1616168

Durán, A., Extremera, N., & Rey, L. (2004). Engagement and burnout: Analysing their association patterns. *Psychological Reports*, *94,* 1048-1050. https://doi.org/10.2466/pr0.94.3.1048-1050

Dynarski, S. M., & Scott-Clayton, J. (2013). *The consequences of dropping out of college*. Brookings Institution.

Fredricks, J. A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of Educational Research, 74*(1), 59–109. https://doi.org/10.3102/00346543074001059

Galve-González, C., Bernardo, A., & Núñez, JC. (2024). Trayectorias académicas: el papel del compromiso como mediador en la decisión de abandono o permanencia universitaria. *Revista de Psicodidáctica*, *29*(2), 130-138 https://doi.org/10.1016/j.psicoe.2024.05.001

George, D., & Mallery, M. (2001). *Using SPSS for Windows step by step: a simple guide and reference*. Alyin y Bacon

González-Morales, O.M., López-Aguilar, D., Álvarez-Pérez, P.R., & Toledo-Delgado, P.A. (2025). Dropping out of higher education: analysis of variables that characterise students who interrupt their studies. *Acta Psychologica, 252*, 104669. https://doi.org/10.1016/j.actpsy.2024.104669

Gustems, J., Navarro, M., & Calderón, C. (2024). El papel del compromiso académico en estudiantes de la mención de educación musical. *Revista Electrónica Complutense de Investigación en Educación Musical - RECIEM, 21*, 79-96. https://doi.org/10.5209/reciem.87837

Guzmán, A., & Barragán, S. (2022). Effects of dropout in higher education: prospective study from a systemic approach. *VISUAL REVIEW. International Visual Culture Review Revista Internacional De Cultura Visual*, *12*(5), 1–12. https://doi.org/10.37467/revvisual.v9.3781

King, R., McInerney, D., Ganotice, F., & Villarosa, J. (2015). Positive affect catalyzes academic engagement: Cross-sectional, longitudinal, and experimental evidence. *Learning and Individual Differences*, *39*, 64-72. https://doi.org/10.1016/j.lindif.2015.03.005.

Kocsis, Á., & Molnár, G. (2024). Factors influencing academic performance and dropout rates in higher education. *Oxford Review of Education*, *51*(3), 1–19. https://doi.org/10.1080/03054985.2024.2316616

Loes, C.N., An, B.P., & Trolian, T.L. (2024). Quality of Student–Faculty Interactions, Persistence, and the Mediating Role of Student Satisfaction. *Journal of Postsecondary Student Success, 3*(4), 20-46. https://doi.org/10.33009/fsop_jpss134793

Marôco, J., Assunçao, H., Harju-Luukkaine, H., Lin, S., Sit, P., Cheung, K., Maloa, B., Stepanović, I., Smith,T., & Campos, J. (2019). Predictors of academic efficacy and dropout intention in university students: Can engagement suppress burnout? *Plos One*, *15*(10), 1-26. https://doi.org/10.1371/journal.pone.0239816.

Martínez, I. M., Bresó, E., Llorens, S., & Grau, R. (2005b). Bienestar psicológico en estudiantes universitarios: facilitadores y obstaculizadores del desempeño académico. *Anales de Psicología*, *21*(1), 170-180. https://revistas.um.es/analesps/article/view/27261

Martos, A., Pérez-Fuentes, M., Molero, M., Gázquez, J., Simón, M., & Barragán, A. (2018). *Burnout* y *engagement* en estudiantes de Ciencias de la Salud. *European Journal of Investigation in Health, Psychology and Education, 8*(1), 23-36. https://www.researchgate.net/publication/324061027_Burnout_y_engagement_en_estudiantes_de_Ciencias_de_la_Salud

McMillan, J. H., & Schumacher, S. (2005). *Investigación educativa: una introducción conceptual*. Pearson Educación.

Medrano, L., Moretti, L., & Ortiz, A. (2015). Medición del Engagement Académico en Estudiantes Universitarios. *Revista Iberoamericana de Diagnóstico y Evaluación - e Avaliação Psicológica*, *2*(40), 114-124. http://www.redalyc.org/articulo.oa?id=459645432012

Merino, E. (2024). Motivación y compromiso académico: modelo teórico y aplicaciones *educativas. Revista INFAD De Psicología. International Journal of Developmental and Educational Psychology*, *1*(1), 61–68. https://doi.org/10.17060/ijodaep.2024.n1.v1.2652

Ministerio de Universidades (2022). *Datos y cifras del Sistema Universitario Español. Publicación 2021-2022*. Disponible en: https://www.universidades.gob.es/wp-content/uploads/2022/11/Datos_y_Cifras_2021_22.pdf

Morentin-Encina, J. (2021). Estudios Perdidos, Aprendizajes Encontrados. Análisis de Aprendizajes desde el Abandono Educativo Temprano. *REICE. Revista Iberoamericana Sobre Calidad, Eficacia*

Y Cambio En Educación, *19*(3), 103–120. https://doi.org/10.15366/reice2021.19.3.007

Muñoz, J.F., & Álvarez, E. (2009). Métodos de imputación para el tratamiento de datos faltantes: aplicación mediante R/Splus. *Revista de Métodos Cuantitativos para la Economía y la Empresa, 7*, 3-30. https://www.upo.es/revistas/index.php/RevMetCuant/article/view/2120

OCDE (2020*). Panorama de la educación 2020: Indicadores de la OCDE*. OCDE Publishing. https://observatoriofiex.es/wp-content/uploads/2021/02/Panorama-Educacion-OCDE-2020.pdf

Oporto, M., Fernández, M., & Calderon, C. (2022). Influence of Facilitating and Hindering of Academic Engagement in Spanish Secondary Students. *International Journal of Instruction*, *15*(1), 39-54. Retrieved from https://eric.ed.gov/?id=EJ1331479

Pusztai, G., Fenyes, H., Szigeti, F., & Pallay, K. (2019). Dropped-out students and the decision to drop-out in Hungary. *Central European Journal of Educational Research*, *1*(1), 31–40. https://doi.org/10.37441/CEJER/2019/1/1/3341

Rahmani, A.M., Groot, W. & Rahmani, H. (2024). Dropout in online higher education: a systematic literature review. *International Journal Education Technology High Education 21*, 19. https://doi.org/10.1186/s41239-024-00450-9

Raykov, T., & Marcoulides, G. A. (2017). Thanks Coefficient Alpha, We still need you! *Educational and Psychological Measurement, 79*(1), 200-210. https://doi.org/10.1177/0013164417725127

Robbins, S. B., & Fredricks, J. A. (2012). Engagement at school and with learning. En S. L. Christenson, A. L. Reschly, & C. Wylie (Eds.), *Handbook of research on student engagement* (pp. 443-479). Springer.

Rumberger, R. W., & Lim, S. A. (2008). *Why Students Drop Out of School: A Review of 25 Years of Research*. California Dropout Research Project.

Salanova, M., Bresó, E., & Schaufeli, W. B. (2005a). Hacia un modelo espiral de las creencias de eficacia en el estudio del burnout y del engagement. *Ansiedad y Estrés*, 11(2-3), 215-231. https://www.ansiedadyestres.es/sites/default/files/rev/ucm/2005/anyes2005a18.pdf

Sarmiento, A. M., Moreno, I. D., & Morón, C. (2023). Engagement Académico: un elemento clave en la educación virtual. *Praxis*, *18*(1), 140–157. https://doi.org/10.21676/23897856.3695

Schaufeli, W. B., Martínez, I. M., Pinto, A. M., Salanova, M., & Bakker, A. B. (2002a). Burnout and engagement in university students: A cross-national study. *Journal of Cross-cultural Psychology, 33*(5), 464-481. https://doi.org/10.1177%2F0022022102033005003

Schaufeli, W. B., Salanova, M., González-Romá, V., & Bakker, A. B. (2002b). The Utrecht Work Engagement Scale: Preliminary test manual. Occupational *Health Psychology, 1*. https://doi.org/10.1037/t07164-000

Schaufeli, W., & Bakker, A. (2003). *Utrecht Work Engagement Scale*. Utrecht University.

Schunk, D. H., & Di Benedetto, M. A. (2021). Motivation and social cognitive theory. *Contemporary Educational Psychology*, *68*, 102028. https://doi.org/10.1016/j.cedpsych.2021.102028

Sepúlveda, L., & Opazo, C. (2016). Deserción Escolar en Chile: ¿Volver la Mirada Hacia el Sistema Escolar? *REICE. Revista Iberoamericana Sobre Calidad, Eficacia Y Cambio En Educación*, 7(4). https://doi.org/10.15366/reice2009.7.4.006

Shersta, N. (2021). Factor Analysis as a Tool for Survey Analysis. *American Journal of Applied Mathematics and Statistics, 9*(1), 4-11. http://dx.doi.org/10.12691/ajams-9-1-2

Sosa-Alonso, J.J., López-Aguilar, D., Álvarez-Pérez, P.R., & González-Morales, O. (2025). Predicting university dropout: connecting big data and structural models. *Studies in Higher Education, 50*(2), 1-18.

https://doi.org/10.1080/03075079.2025.2462675

Taber, K. S. (2018). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. *Research in Science Education, 48*, 1273-1296. https://doi.org/10.1007/s11165-016-9602-2

Truta, C., Parv, L., & Topala (2018). Academic Engagement and Intention to Drop Out: Levers for Sustainability in Higher Education. *Sustainability*, *10*(12), 4637. http://dx.doi.org/10.3390/su10124637

Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd ed.). University of Chicago Press.

Tomczak, M., & Tomczak, E. (2014). The need to report effect size estimates revisited. An overview of some recommended measures of effect size. *Trends Sport Sciences, 1*(21), 19-25. https://www.wbc.poznan.pl/Content/325867/5_Trends_Vol21_2014_%20no1_20.pdf

Valero-Ancco, V. N., Lujano-Ortega, Y., Calderon-Quino, K. M., & Pari-Orihuela, M. (2024). Labor Situation and Academic Engagement in University Students. *Revista De Gestão Social E Ambiental*, *18*(8), e07552. https://doi.org/10.24857/rgsa.v18n8-113

Viladrich, C., Angulo-Brunet, A., & Doval, E. (2017). Un viaje alrededor de alfa y omega para estimar la fiabilidad de consistencia interna. *Anales de Psicología, 33*(3), 755-782. https://doi.org/10.6018/analesps.33.3.268401

Wang, M., & Fredricks, J. (2014). The reciprocal links between school engagement, youth problem behaviors, and school dropout during adolescence. *Child Development, 85* (2), 722-737. https://doi.org/10.1111/cdev.12138

Zepke, N., & Leach, L. (2010). Improving student engagement: A synthesis of research. *Teaching in Higher Education*, *15*(2), 167-178. https://doi.org/10.1177/1469787410379680

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