

Factors influencing early school dropout: student's perspective

Factores de influencia en la intención de abandono escolar temprano: perspectiva del estudiantado

Iratxe Suberviola ^{1*} 
Fermín Navaridas Nalda ¹ 
Ana González Marcos ¹ 

¹ Universidad de La Rioja, Spain

* Corresponding author. E-mail: iratxe.suberviola@unirioja.es

How to reference this article :

Suberviola, I., Navaridas Nalda, F., & González Marcos, A. (2024). Factors influencing early school dropout: student's perspective. *Educación XX1*, 27(1), 229-252. <https://doi.org/10.5944/educxx1.36980>

Date of received: 15/02/2023
Date of acceptance: 18/07/2023
Published online: 02/01/2024

ABSTRACT

Reducing early school dropout rates continues to be a priority line of action for education systems worldwide. In this sense, it seems appropriate to advance in the understanding of the factors that predispose students to make this decision, which can have disruptive effects on both personal and social levels. Sensitive to its importance, this work aims to identify factors that influence the intention to drop out of school early. To do so, we adopted a quantitative methodological approach through a survey procedure. Its application took place in the Autonomous Community of La Rioja (Spain), where the problem of early school leaving is a key area of work in its political agenda. The survey was carried out by administering an ad hoc questionnaire to the population of students in the last years of compulsory education and the first year of non-compulsory education. The participating sample consisted of 1157 students. The results indicate that the usefulness attributed to the study activity and the perceived relative ease of obtaining the academic qualification are two factors of significant influence on the intention to drop out of school early. Additionally,

the socio-familial context of the students and the human resources of the school are also significant predictors of this same intention. We conclude by stressing the need to address the problem of early school leaving from a multidimensional approach that helps students to become aware of the usefulness and deep meaning of the educational task, while at the same time promoting positive motivational beliefs about the value of effort in order to successfully face valuable and challenging educational goals.

Keywords: early school dropout, student perception, perceived usefulness, self-efficacy, perceived ease, secondary education

RESUMEN

En la actualidad, reducir la tasa de abandono escolar temprano continúa siendo una línea de acción prioritaria para los sistemas educativos de todo el mundo. En este sentido, parece conveniente avanzar en la comprensión de los motivos que predisponen al estudiantado a tomar esta decisión con efectos perturbadores tanto a nivel personal como social. Sensibles con su importancia, este trabajo tiene como objetivo identificar factores de influencia en la intención de abandono escolar temprano. Para ello, adoptamos un enfoque metodológico de carácter cuantitativo a través del procedimiento de encuesta. Su aplicación tuvo lugar en la Comunidad Autónoma de La Rioja (España), donde el problema del abandono escolar temprano constituye un área clave de trabajo en su agenda política. La encuesta se realizó mediante la administración de un cuestionario *ad hoc* a la población de estudiantes escolarizados en los últimos cursos de la etapa obligatoria y primer curso de la etapa no obligatoria. La muestra participante estuvo constituida por 1157 estudiantes. Los resultados indican que la utilidad atribuida a la actividad de estudio y la facilidad relativa percibida para conseguir el título académico son dos factores de influencia significativa en la intención de abandono escolar temprano. En otro orden, el contexto sociofamiliar del estudiantado y los recursos humanos del centro también son predictores significativos de esta misma intención. Concluimos subrayando la necesidad de abordar el problema del abandono escolar temprano desde un enfoque multidimensional que ayude al estudiantado a tomar conciencia de la utilidad y significado profundo de la tarea educativa, promoviendo al mismo tiempo y de forma relacionada creencias motivacionales positivas sobre el valor del esfuerzo para afrontar con éxito metas educativas valiosas y desafiantes.

Palabras clave: abandono escolar temprano, percepción del estudiantado, utilidad percibida, autoeficacia, facilidad percibida, educación secundaria

INTRODUCTION

Despite the fact that the reduction of Early School Leaving (ESL) is one of the primary objectives outlined in major European agreements and structural reform programs, it remains a significant educational and social challenge in Spain. Following the COVID-19 lockdowns, this problem seems to worsen with an increase of 0.6% in the rate of early school leaving, standing at 13.9% overall; 16.5% for males and 11.2% for females, compared to 9.7% in the European Union (Ministry of Education and Vocational Training, 2023). The ESL rate is defined as the percentage of 18-24 year olds who have not completed upper secondary education and have not followed any type of study or training in the last four weeks (Instituto Nacional de Estadística [INE], 2022).

The scientific literature in this field considers Early School Leaving (ESL) as the outcome of a process that begins when students still in school. This process is determined by a complex interplay of both academic and non-academic factors, which are highly sensitive to the variation of personal situations and social context. Moreover, it has a strong impact both on the later life of the individual who fails to complete their educational process and on society as a whole (Bayón-Calvo et al, 2020; Bayona-i-Carrasco & Domingo, 2021; Conde et al, 2023; González-Rodríguez et al, 2019; Montero-Sieburth & Turcatti, 2022). Some of the effects of ESL are often related to situations of unemployment and job insecurity, poverty and social exclusion, as well as to problems related to physical and mental well-being (European Education and Culture Executive Agency, 2019; World Health Organisation, 2021). Against this background, the fundamental question arises: What factors exert the most significant influence on a student's intention to prematurely leave school without completing compulsory education, and to what extent can individual characteristics account for significant differences in early school leaving intentions? Broadly speaking, these questions constitute the problem under study in this paper.

Previous research highlights the influence of individual student variables, such as gender, age, nationality and place of residence, on their expectations and school decisions (Bayón-Calvo et al, 2020; Cardwell, 2023). Within this same dimension, other studies refer to personal factors related to students and their educational history, such as healthy habits, emotional situation, academic pathway, grade repetition and disruptive behavior within the school environment (Conde et al, 2023; González-Rodríguez et al., 2019; López-Aguilar et al, 2023; Montero-Sieburth & Turcatti, 2022). These factors can generate disengagement and a lack of commitment to the educational process, significantly impacting the decision to continue studying.

It is true that, in addition to individual variables and personal and school history factors, there are other aspects related to the cognitive dimension of students that

may also influence ESL. Some research underscores the importance of considering students' personal perception or internal belief systems regarding the consequences of their behaviour and the surrounding social context (Tarabini et al., 2019).

In this regard, prior studies, such as Eccles and Wigfield (2002), have highlighted the importance of several cognitive factors in students' decisions. These factors include perceived utility of the educational process, perceived self-efficacy in achieving academic goals, and the degree of overall and relative ease that students attribute to the educational task in relation to the estimated utility value, time and effort to achieve it. In addition, there exists empirical evidence that the decisions made by students and the outcomes of these decisions in terms of educational commitment, responsibility, continuity of effort or perseverance are influenced to a large extent by their emotional state (Schunk & Usher, 2020; Tarabini et al., 2019; Vera et al., 2021).

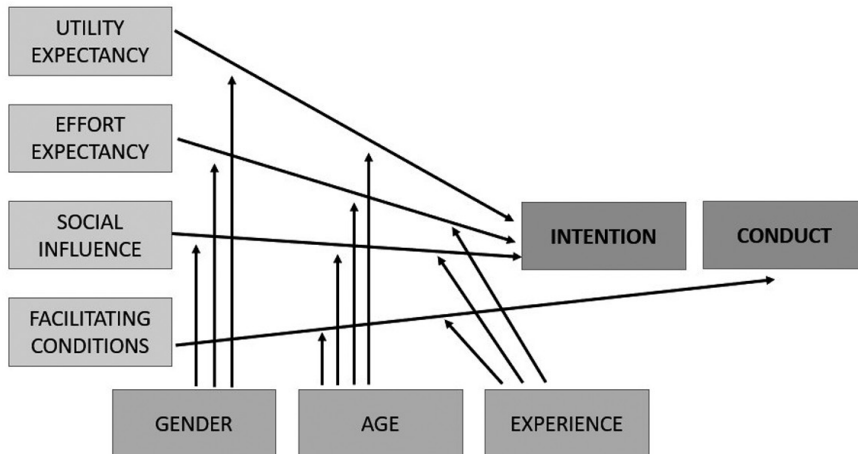
In relation to the above, and based on the Theory of Reasoned Action (Venkatesh et al., 2003), we find that these same factors have been examined in scientific fields beyond education. This has given rise to very interesting research models that can be used to understand and predict students' ESL intentions in the context under study (Figure 1). In general terms, the starting hypothesis of these models assumes that our actions are shaped by our evaluation of the expectations or expected outcomes of our actions. Specifically, the perceived usefulness of the task, the perceived self-efficacy in achieving the goals set, or the perceived level of ease in relation to a given activity or situation. Furthermore, the influence of other moderating variables, such as gender, age or school history, is explored.

In the same line of research, other authors have also identified risk factors for ESL that enhance the understanding of this phenomenon. Some of these factors are linked to subjective normative beliefs or negative influences from friends, peers or reference group with high levels of absenteeism, antisocial attitudes or educational problems (González-Rodríguez et al., 2019; Montero & Turcatti, 2022; Sánchez-Alhambra, 2017). In addition, socio-familial characteristics perceived by students (Conde et al., 2023) and the characteristics of the teaching context where their educational activity takes place (Olmos & Gairín, 2022) may also have an influence. In relation to the educational context, some studies have concluded that students' commitment to their educational process does not arise exclusively from the merit or personal effort of the students. It is significantly influenced by the enabling conditions, support and assistance perceived from the teaching staff and the school's administrative team (Tarabini et al., 2019).

Consequently, the aim of this study is to identify factors influencing ESL intention through the perspective of the students themselves. In addition, we endeavor to explore potential noteworthy distinctions in terms of moderating variables, such as gender, age or the educational history of the students under investigation.

Figure 1

Venkatesh et al. (2003) research model based on the Theory of Reasoned Action



Source. Adapted from Venkatesh et al. (2003).

METHOD

A cross-sectional design was used for this study, based on the application of a survey to the population of students enrolled in the last years of compulsory education or in the first year of non-compulsory education during the 2020/2021 academic year.

To select the sample subjects, convenience sampling method was carried out. The questionnaire was distributed to educational centers via the Directorate General for Educational Innovation. Following the acquisition of parental consent, all students were invited to participate, with the final sample being made up of those who agreed to participate freely. Data collection was carried out online, using the questionnaire implemented in the LimeSurvey tool, in April and May 2021.

Participants and procedure

The study population of this research consisted of 6131 students in the Autonomous Community of La Rioja (Spain), distributed among 46 schools in which the last years of the compulsory stage and the first year of the non-compulsory stage are taught. All students invited to participate were informed of the purpose

of the study and were asked to respond honestly, as the collection and subsequent processing of the data would be completely anonymous at all times. It should be noted that the university's ethics committee gave a favorable opinion on this research. In fact, the entire process was carried out in accordance with the ethical code proposed by the Committee on Publications Ethics and Estalella (2022), specifically designed for socio-educational research involving a minor population.

Finally, the participating sample consisted of 1157 students from 17 schools. As shown in Table 1, all grades or schooling programs included in the study are represented with at least 10.7% of the population. With a margin of error of 1.6% and a confidence level of 95%, this sample is considered acceptable in socio-educational studies (Herba & Rocha, 2018).

Table 1

Relationship between population and sample

| | Total | 4º ESO (Academic) | 4º ESO (Technological) | PMAR2 | FPB | 1º CFGM | ATE | ASE |
|------------|-------|----------------------|---------------------------|-------|------|------------|------|------|
| Population | 6131 | 2118 | 902 | 390 | 1052 | 1615 | 26 | 28 |
| Sample | 1157 | 463 | 210 | 121 | 172 | 173 | 8 | 10 |
| % | 18.9 | 21.9 | 23.3 | 31.0 | 16.3 | 10.7 | 30.8 | 35.7 |

Note. PMAR2: 2nd year of the Program for the Improvement of Learning and Performance; FPB: 1st and 2nd of Basic Vocational Training in any of its families; CFGM: 1st year of the Intermediate Training Cycle in any of its families; ATE: Therapeutic-Educational Classrooms; ASE: Socio-educational Inclusion Classrooms.

Regarding the sample's characteristics, we successfully obtained representation from population centres of different sizes (48.06% resided in an urban setting, 30.16% in a semi-urban setting and 21.78% in a rural setting). 72.34% of the participants were in the compulsory school age range (14-16 years) compared to 27.66% over 16 years. The remaining socio-demographic data of the participants are shown in Table 2.

Table 2
Sociodemographic characteristics

| | | Gender | | | | | | | | | |
|--|--------|--------|--------|--------|--------|--------|--------|----|-------|-----|-------|
| | | Man | Woman | Other | | | | | | | |
| 569 | | 49.18% | 557 | 48.14% | 31 | 2.68 | | | | | |
| Age (years) | | | | | | | | | | | |
| 14 | 15 | 30.68% | 457 | 39.50% | 193 | 16.68% | | | | | |
| 25 | 2.16% | 355 | 30.68% | 457 | 39.50% | 193 | 16.68% | 72 | 6.22% | 55 | 4.75% |
| Place of residence | | | | | | | | | | | |
| Small town | | | | | | | | | | | |
| 252 | 21.78% | 349 | 30.16% | 556 | 48.06% | | | | | | |
| Language of birth | | | | | | | | | | | |
| Spanish | | | | | | | | | | | |
| 1005 | 86.86% | 59 | 5.10% | 91 | 7.87% | | | | | | |
| Country of origin | | | | | | | | | | | |
| Spain | | | | | | | | | | | |
| 950 | 82.11% | 50 | 4.32% | 23 | 1.99% | 23 | 1.99% | 11 | 0.95% | 100 | 8.64% |
| Morocco | | | | | | | | | | | |
| Pakistan | | | | | | | | | | | |
| Rumania | | | | | | | | | | | |
| China | | | | | | | | | | | |
| Other | | | | | | | | | | | |
| Ownership of the center | | | | | | | | | | | |
| Publics | | | | | | | | | | | |
| 648 | 56.01% | 509 | 43.99% | | | | | | | | |
| Private/concerted | | | | | | | | | | | |
| Disruptive behavior (expulsions from the classroom/center) | | | | | | | | | | | |
| Never | | | | | | | | | | | |
| 950 | 82.10% | 118 | 10.19% | 56 | 4.84% | 16 | 1.38% | 17 | 1.46% | | |
| Rarely | | | | | | | | | | | |
| Sometimes | | | | | | | | | | | |
| Often | | | | | | | | | | | |
| Many Time | | | | | | | | | | | |
| Course repetition | | | | | | | | | | | |
| Educational support | | | | | | | | | | | |
| Sí | | | | | | | | | | | |
| 526 | 45.46% | 631 | 54.53% | 85 | 7.34% | 1072 | 92.65% | | | | |
| No | | | | | | | | | | | |
| Yes | | | | | | | | | | | |
| No | | | | | | | | | | | |

Instrument

Following an exhaustive and methodical literature review on the main causes and factors influencing early leaving, an ad hoc questionnaire was developed with the dimensions and factors considered (see Table 3), with a total of 62 items, with Likert-type response options (1 = strongly disagree, 5 = strongly agree). The full questionnaire can be found in (Suberviola et al., 2023).

Table 3
Description of the dimensions and factors of the study

| Dimensions | Factors | Variables |
|--------------------------|-------------------------------|----------------------|
| Moderating variables | Identity | Gender |
| | | Age |
| | | Place of residence |
| | | Native language |
| | | Country of birth |
| | School history | Schooling program |
| | | Center ownership |
| | | Disruptive behavior |
| | | Course repetition |
| | | ACNEAE |
| Performance expectations | Perceived usefulness (UTL) | Job development |
| | | Personal development |
| | | Social development |
| | Perceived self-efficacy (AUT) | Ability |
| | | Academic skills |
| | | Perseverance |
| Effort expectations | Global Ease of Use (FACG) | Overall Ease of Use |
| | Relative ease of use (FACR) | Relative ease of use |

| Dimensions | Factors | Variables |
|---------------------------------------|---------------------------------------|----------------------------|
| Social-educational influence | Subjective norm (NSUB) | Family influence |
| | | Equal influence |
| | | Social influence |
| | Context (CONT) | Educational climate |
| | | Labor market possibilities |
| | | Neighborhood-zone |
| Facilitating conditions | Functional Resources (RRFF) | Organization-planning |
| | | Assessment |
| | | Curricular rigidity |
| | Material resources (RRMM) | Information |
| | | Infrastructure |
| | Human resources (HR) | Teaching materials |
| | | Faculty |
| | | Student body |
| | Intention to leave school early (INT) | |
| Intention to leave school early (INT) | | |

The content validation of the questionnaire was developed by adapting the Delphi method, which involved a structured sequence encompassing three phases (preliminary, exploratory, final). These phases were carried out by a coordinating group and an expert group. The validation process was completed with a pilot test on a sample with homologous characteristics to our study population. This validation process involved eliminating and/or modifying the wording of some items, as well as changing the dimension of some of them.

Subsequently, a confirmatory factor analysis (CFA) was carried out to assess that the designed instrument provided reliable measures with which to make valid inferences. Convergent validity was analyzed through factor loadings and average variance extracted, while discriminant validity was assessed through the HTMT (heterotrait-monotrait) ratio of correlations (Henseler et al., 2015). Regarding reliability, composite reliability (CF) and internal consistency measured with McDonald's omega method were analyzed. This coefficient was selected instead of Cronbach's α , since it generates greater stability and a better estimate of reliability as it is not affected by the number of items or compliance with the tau equivalence principle (Dunn et al., 2014).

Based on the validity results, the of seven items in six of the factors (UTL, AUT, NSUB, CONT, RRMM and RRHH) was considered because they had a factor loading below .5, a threshold considered acceptable (Hair et al., 2010). After these modifications, six factors (FACG, FACR, CONT, RRMM, RRHH and INT) had McDonald FC and omega values equal to or higher than the recommended value of .7 (Lloret et al., 2014). The remaining factors (UTL, AUT, NSUB and RRF) had McDonald FC and omega values between .6 and .7, also accepted as adequate (Ursachi et al., 2015), so their reliability is considered acceptable. On the other hand, although most of the factors had mean variance extracted values below .5, given that their FC was above .6, their convergent validity is still considered adequate (Hamid et al., 2017) (Table 4).

Table 4
Reliability and convergent validity

| | Ítem | Factor Loading | Composite Reliability | Mean Variance Extracted | McDonald's Omega |
|-----------------|-------|----------------|-----------------------|-------------------------|------------------|
| Utility | UTIL1 | .83 | .71 | .47 | .68 |
| | UTIL2 | .74 | | | |
| | UTIL4 | .50 | | | |
| Self-efficacy | AUT1 | .55 | .64 | .31 | .65 |
| | AUT3 | .54 | | | |
| | AUT4 | .65 | | | |
| | AUT5 | .50 | | | |
| Overall ease | FACG1 | .59 | .71 | .45 | .70 |
| | FACG2 | .65 | | | |
| | FACG3 | .76 | | | |
| Relative ease | FACR1 | .79 | .82 | .61 | .83 |
| | FACR2 | .83 | | | |
| | FACR3 | .71 | | | |
| subjective norm | NSUB1 | .50 | .60 | .36 | .61 |
| | NSUB2 | .72 | | | |
| | NSUB3 | .69 | | | |
| Context | CONT1 | .69 | .70 | .45 | .73 |
| | CONT2 | .82 | | | |
| | CONT5 | .52 | | | |

| | Ítem | Factor Loading | Composite Reliability | Mean Variance Extracted | McDonald's Omega |
|-----------------------|-------|----------------|-----------------------|-------------------------|------------------|
| Functional resources | RRFF1 | .58 | .67 | .34 | .67 |
| | RRFF2 | .69 | | | |
| | RRFF3 | .54 | | | |
| | RRFF4 | .53 | | | |
| Material resources | RRMM1 | .69 | .78 | .47 | .76 |
| | RRMM2 | .71 | | | |
| | RRMM3 | .66 | | | |
| | RRMM4 | .67 | | | |
| Human Resources | RRHH1 | .57 | .71 | .45 | .70 |
| | RRHH2 | .73 | | | |
| | RRHH4 | .70 | | | |
| Abandonment intention | INT1 | .88 | .76 | .53 | .70 |
| | INT2 | .78 | | | |
| | INT3 | .48 | | | |

Finally, evidence of discriminant validity was also collected (Table 5), as in no case was the threshold suggested by Kline (2016) of .85 exceeded.

Table 5
Discriminant validity

| | UTIL | AUT | FACG | FACR | NSUB | CONT | RRFF | RRMM | RRHH | INT |
|-------------|------|------|------|------|------|------|------|------|------|-----|
| UTIL | - | | | | | | | | | |
| AUT | .497 | - | | | | | | | | |
| FACG | .358 | .745 | - | | | | | | | |
| FACR | .598 | .685 | .424 | - | | | | | | |
| NSUB | .518 | .440 | .330 | .586 | - | | | | | |
| CONT | .367 | .672 | .389 | .515 | .580 | - | | | | |
| RRFF | .348 | .711 | .431 | .568 | .552 | .558 | - | | | |
| RRMM | .285 | .533 | .327 | .469 | .473 | .477 | .815 | - | | |
| RRHH | .238 | .498 | .312 | .399 | .472 | .520 | .756 | .746 | - | |
| INT | .443 | .472 | .280 | .574 | .300 | .450 | .323 | .260 | .294 | - |

Data analysis

First, the presence of extreme or spurious data (outliers) was analysed by calculating the Mahalanobis distance. The results showed p-values greater than .001 ($p = .13 - .94$) for all the factors of the scale, so that the sample was considered to be free of multivariate outliers.

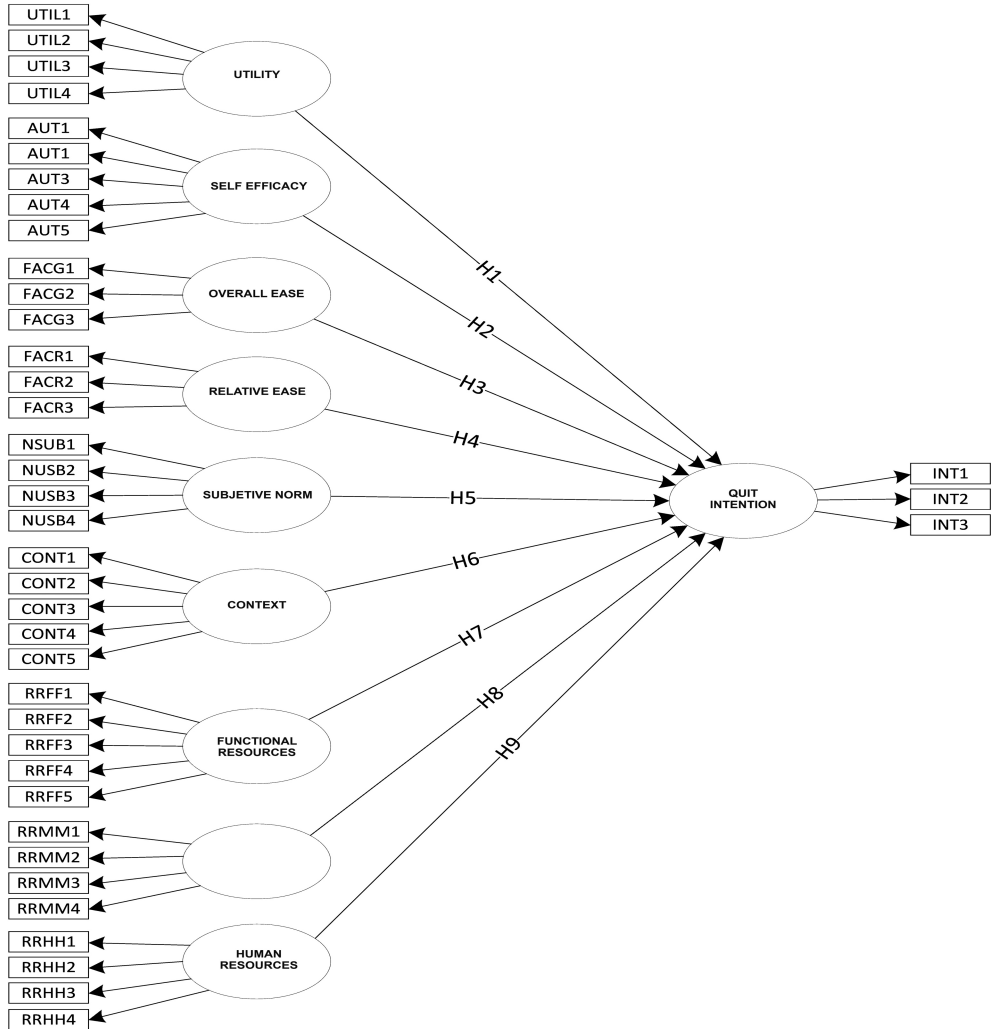
After verifying the psychometric requirements of reliability and validity, the structural model was created to test the hypotheses (Figure 2). It should be noted that, according to Mardia's test, the multivariate normality condition was not met, so a robust estimator was used. In particular, the maximum likelihood method with Satorra-Bentler corrections was used, as it generates reliable statistics, even when normality assumptions are violated.

Finally, the possible differences between the different interest groups (moderator variables) were analyzed. For this purpose, with the SEM model validated, a multigroup confirmatory factor analysis was carried out. In order to compare the means of the factors considered, we first evaluated for measurement invariance. Measurement invariance is considered to be admissible if, first, the plausibility of the model is confirmed for each of the groups considered and, sequentially, at least configuration invariance, weak or metric invariance and strong or scalar invariance are satisfied (Svetina et al., 2021). Configuration invariance was assessed through a global model fitting, while metric and scalar invariance were assessed progressively by comparing two nested models that are identical except for the set of constraints added in one of them.

In those cases where scalar invariance was confirmed, the means of the latent variables were compared. For this purpose, and given that the assumption of normality was not met, the differences between two groups were analyzed using the Mann-Whitney U test and the comparison between more than two groups was carried out using the Kruskal-Wallis test. If the results of this test indicated statistically significant differences, to identify which groups differed, a post hoc comparison with Dunn's test was performed between each pair of groups with Bonferroni significance correction. In all cases it was confirmed that there was no evidence against homogeneity of variances using Levene's test. Effect sizes for differences between two groups were calculated using the rank biserial correlation (r_b), with the effect being very small if r_b is less than 0.10, small if $r_b = 0.10-0.29$, moderate if $r_b = 0.30-0.49$ and large if r_b is greater than or equal to 0.50. For differences between more than two groups, effect sizes were obtained with epsilon squared (ϵR^2), with the effect being very small if ϵR^2 is less than 0.01, small if $\epsilon R^2 = 0.01-0.05$, moderate if $\epsilon R^2 = 0.06-0.13$ and large if ϵR^2 is greater than or equal to 0.14.

In particular, for both the AFC and the structural model (SEM), the packages psych (Revelle, 2021) and lavaan (Rosseel, 2012) were used.

Figure 2
Proposed structural model



Note. Error terms and covariances between first-order factors are omitted for clarity.

RESULTS

The structural equation model illustrated in Figure 3 reflects the nine investigated factors and their influence on the intention to leave school early. Looking at the fit indices of the model, all were satisfactory according to the criteria recommended in the literature (Kline, 2016) (Table 6), so it can be stated that there is a good fit between the proposed research model and the observed data.

Table 6
Model goodness-of-fit indices

| | Absolute fit | | Incremental adjustment | | Parsimonious fit | |
|-------------------------------------|--------------|-------------------|------------------------|------------|------------------|-------------|
| | SRMR | RMSEA (IC 90%) | CFI | TLI | PNFI | χ^2/df |
| Recommended adjustment level | $\leq .05$ | $\leq .05$ | $\geq .90$ | $\geq .90$ | $\geq .70$ | ≤ 3 |
| Adjustment level obtained | .041 | .037 (.034, .040) | .939 | .928 | .760 | 2.37 |

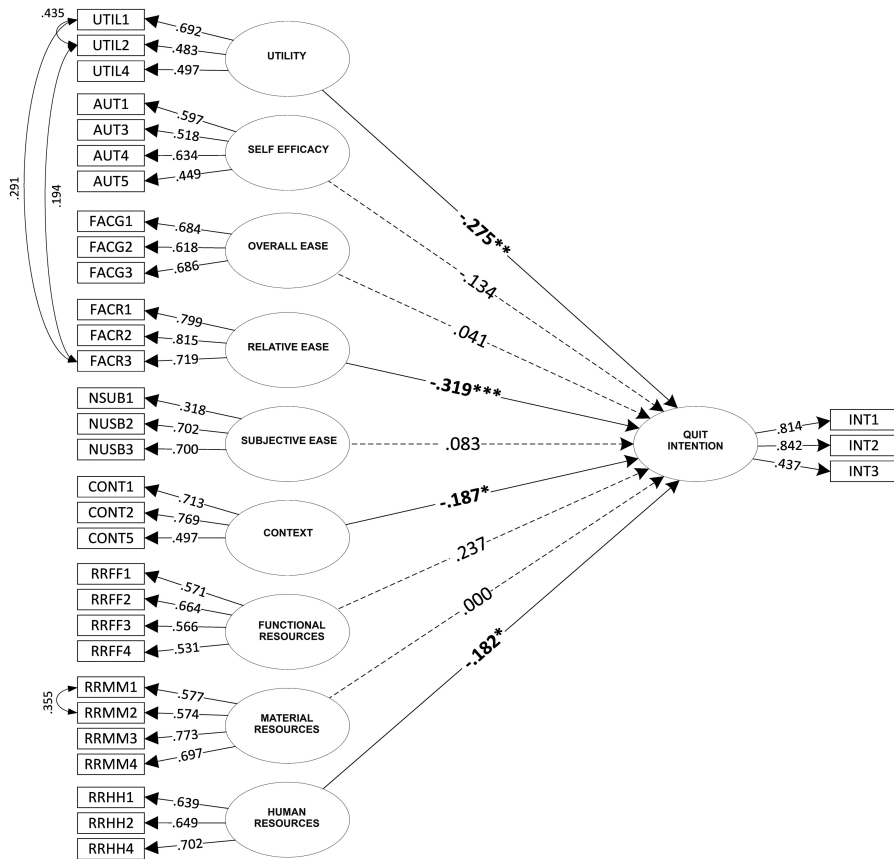
Note. SRMR: Standardized Root Mean squared Residual; RMSEA: Root Mean Square Error of Approximation; IC: Intervalo de confianza; CFI: Comparative Fit Index; TLI: Tucker-Lewis Index; PNFI: Parsimony Normed Fit Index; df: degrees of freedom.

On the other hand, the model is able to explain approximately 41% of the total variance of the quitting intention construct ($R^2 = .411$), which is considered acceptable (Hair et al., 2011) and supports the conformity of the model.

Table 7 shows the standardized model estimates of the relationships explored in the model. To establish the degree of relationship intensity, a relationship is considered strong when β is greater than .2 and moderate when β is between .1 and .2 (Chin, 1998).

From this regression analysis, it is observed that both “relative ease” ($\beta = -.319$, $p < .001$) and “perceived usefulness” ($\beta = -.275$, $p < .01$) have a significant effect on intention to drop out. Likewise, the factors “social context” ($\beta = -.187$, $p < .05$) and “human resources” ($\beta = -.182$, $p < .05$) are also statistically significant predictors of intention to drop out. As for the rest of the factors investigated, none of them was statistically significant at the global level.

Figure 3
Adjusted research model



Note. * $p < .05$; ** $p < .01$; *** $p < .001$. Covariances between first-order factors are omitted for clarity.

Table 7
Regression parameters for the research model

| Hypothesis | Model relationships | Estimate | E.T. | β |
|------------|---|----------|------|----------|
| H1 | Utility \rightarrow Quit intention | -0.290 | .102 | -.275** |
| H2 | Self-efficacy \rightarrow Intention to quit | -0.171 | .308 | -.134 |
| H3 | Overall ease \rightarrow Intention to quit | 0.040 | .117 | .041 |
| H4 | Relative ease \rightarrow Intention to quit | -0.300 | .079 | -.319*** |

| Hypothesis | Model relationships | Estimate | E.T. | β |
|------------|---|----------|------|---------|
| H5 | Subjective norm \rightarrow Intention to quit | 0.149 | .141 | .083 |
| H6 | Context \rightarrow Intention to abandon | -0.168 | .078 | -.187* |
| H7 | Functional resources \rightarrow Quit intention | 0.280 | .190 | .237 |
| H8 | Material resources \rightarrow Intention to abandon | 0.000 | .126 | .000 |
| H9 | Human resources \rightarrow Quit intention | -0.203 | .097 | -.182* |

Note. * $p < .05$; ** $p < .01$; *** $p < .001$. E.T.: Typical error; β : standardized coefficient.

Regarding the results obtained in the multigroup analysis, the increase in CFI (Δ CFI), RMSEA (Δ RMSEA) and SRMR (Δ SRMR) was established as an evaluation criterion. Following the criterion proposed by Chen (2007), a .01 change in CFI is considered acceptable, so that if the difference in CFI between two nested models is greater than .01 in favor of the less restrictive model, the more restrictive model should be rejected. It is also considered that variances of RMSEA (Δ RMSEA) $\leq .015$ and SRMR (Δ SRMR) $\leq .030$ for metric invariance and .010 for scalar invariance are adequate to accept the invariance. All in all, measurement invariance was confirmed for all the variables analyzed, making it possible to compare the means of the latent variables.

With respect to the gender variable, it was observed that women's intention to quit (MM = 1.55) was lower than that of men (MH = 1.73), finding statistically significant differences with small effect size ($Z = 6.8$, $p < .001$, $rb = .13$). Perceived self-efficacy' values were also significantly lower for females (MM = 3.63) than for males (MH = 3.80), albeit with a very small effect size ($Z = 3.5$, $p < .001$, $rb = .07$). However, in both "perceived usefulness" (MM = 4.03, MH = 3.85; $Z = -4.3$, $p < .001$, $rb = -.10$) and "relative ease" (MM = 4.34, MH = 4.08; $Z = -8$, $p < .001$, $rb = -.15$), "subjective norm" (MM = 3.70, MH = 3.48; $Z = -5.9$, $p < .001$, $rb = -.11$) and "resource functions" (MM = 3.51, MH = 3.40; $Z = -3.1$, $p = .002$, $rb = -.05$), women showed higher values.

With respect to the age variable, a direct relationship between age and intention to drop out was identified: students aged 18 or older were those who indicated a higher intention to drop out ($M_{\geq 18} = 1.98$ vs. $M_{17} = 1.81$, $M_{16} = 1.60$ and $M_{\leq 15} = 1.52$). Statistically significant differences were found with a small effect size ($\chi^2 = 98$, $gl = 3$, $p < .001$, $\epsilon R^2 = .028$).

Specifically, these differences were observed between participants aged 15 or younger and those aged 17 ($Z = -6.56$, $p < .001$) and 18 or older ($Z = -8.37$, $p < .001$), as well as between participants aged 16 and those aged 17 ($Z = -5.18$, $p < .001$) and 18 or older ($Z = -7.21$, $p < .001$). Despite expressing a higher intention to drop out,

the 18+ age group also offered higher scores, with significant differences, on the variables “usefulness” ($M_{\geq 18} = 4.11$, $M_{17} = 3.84$, $M_{16} = 3.90$ and $M_{\leq 15} = 3.97$; $\chi^2 = 15$, $gl = 3$, $p = .002$, $\epsilon R^2 = .004$), “overall ease” ($M_{\geq 18} = 3.54$ vs. $M_{17} = 3.28$, $M_{16} = 3.30$ and $M_{\leq 15} = 3.35$; $\chi^2 = 18$, $gl = 3$, $p < .001$, $\epsilon R^2 = .005$), and “material resources” ($M_{\geq 18} = 3.89$ vs. $M_{17} = 3.82$, $M_{16} = 3.70$ and $M_{\leq 15} = 3.65$; $\chi^2 = 35$, $gl = 3$, $p < .001$, $\epsilon R^2 = .007$) and “functional resources” ($M_{\geq 18} = 3.75$ vs. $M_{17} = 3.50$, $M_{16} = 3.38$ and $M_{\leq 15} = 3.38$; $\chi^2 = 58$, $gl = 3$, $p < .001$, $\epsilon R^2 = .013$).

Regarding the schooling programme, students enrolled in non-regular pathways (FPB, PMAR, ASE and ATE), presented a higher score, with a significant difference and small effect size ($Z = 12$, $p < .001$, $rb = .23$), in intention to drop out (MNO_ORDINARIES = 2.01, MORDINARIES = 1.52) and a lower score, also with significant difference and small effect size ($Z = -7.5$, $p = .001$, $rb = -.15$), in “relative ease” (MNO_ORDINARIES = 4.01, MORDINARIES = 4.27).

It was also observed that students who had repeated a school year scored significantly higher on intention to drop out (MREPETIDORS = 1.87, MNO_REPETIDORS = 1.46; $Z = -13$, $p < .001$, $rb = -.22$). However, their scores were lower on “context” (MREPETIDORS = 3.74, MNO_REPETIDORS = 4.01; $Z = 6.8$, $p < .001$, $rb = .13$), “self-efficacy” (MREPETIDORS = 3.45, MNO_REPETIDORS = 3.68; $Z = 5.9$, $p < .001$, $rb = .10$), “relative ease” (MREPETIDORS = 4.11, MNO_REPETIDORS = 4.27; $Z = 4.7$, $p < .001$, $rb = .08$) and “global ease” (MREPETIDORS = 3.27, MNO_REPETIDORS = 3.40; $Z = 3.4$, $p < .001$, $rb = .06$).

Finally, no statistically significant differences in intention to drop out were identified as a function of place of residence.

DISCUSSION AND CONCLUSIONS

Given the need to reduce the ESL rate in our educational system (Ministry of Education and Vocational Training, 2023), it is necessary to continue building knowledge that allows us to better understand the reasons that lead young adolescents to drop out of school. To contribute to this purpose, this research has focused on identifying the factors that influence the intention to drop out of ESL from the perspective of the students themselves. Possible significant differences in terms of moderating variables such as gender, age and school history have also been considered.

Based on the results obtained, it can be concluded that, from the perspective of the students themselves, perceived usefulness and relative ease are the two factors with the greatest significant influence on the intention to drop out.

In this sense, and as shown in similar studies (Conde et al., 2023; Moeller et al., 2020), the utility value or meaning that a student attributes to his or her educational process at school is a determining factor in his or her decision to drop out or not.

This value may be related to motivations such as obtaining an academic degree, achieving a good financial situation, following a vocation or gaining prestige. In addition, the results also suggest that the intention of the students investigated is influenced to a large extent by the perceived ease or difficulty of educational activity. This perception is related to the consequences or the value of the expected results of their personal effort and dedication to study. Along the same line of thought as Tarabini et al. (2019), we can conclude that if a student considers that the effort of continuing with their studies is not worth it because they cannot imagine a better future or do not believe that they will be adequately recognized, it is likely that they will not find it worthwhile to continue studying.

However, contrary to expectations (Casanova et al, 2018), this direct effect on ESL intention does not occur significantly with perceived academic self-efficacy. For Shunk and DiBenedetto (2020), the positive influence of self-efficacy on engagement, self-regulation and effort does not emerge suddenly. It is a cognitive process in which students use different sources of information to construct an interpretation of their personal ability to cope effectively with what the instructional context demands of them in a given situation. Accordingly, a possible explanation for the results obtained on self-efficacy is the possible formation of weak or erroneous conceptions on the part of the students about the expected academic achievements or goals, the utilitarian value of the educational task or the deep meaning of the same for their future personal and professional life project. The results of other studies (López-Aguilar et al., 2023) highlight the importance of this approach in the field of higher education, confirming its influence on students' capacity and management of resilience to effectively face adverse educational situations and the risk of dropping out.

With respect to the socio-educational dimension investigated, the analysis carried out reveals a significant influence of the family context (family climate, family support in studies) and the student's immediate environment (job opportunities, leisure and free time, socio-economic and cultural level of the place of residence). These results confirm findings obtained in recent research in this same field of study (Conde et al., 2023), highlighting the significant influence of socio-familial characteristics on students' attitudes and behaviors in the classroom as determinants of ESL. In the same line of research, other authors highlight the significant effect of socio-economic and cultural context on the intention of ESL (González-Rodríguez et al., 2019).

However, in contrast to what has been pointed out by other authors in this same dimension (González-Rodríguez et al., 2019; Montero & Turcatti, 2022), no significant influence of the students' subjective normative beliefs on what their friends or peer group think about the intention of ESL was observed. This result suggests that most of the students investigated are in what some call "middle adolescence" (Allen &

Waterman, 2019), a stage where students expect understanding, empathy and the possibility of expressing themselves freely without feeling judged by their peer group. From this perspective, it is possible to think that the peer group's point of view has a greater impact on aspects such as clothing, music or leisure activities, compared to important decisions related to study, which are considered more in later adolescent stages.

In relation to the facilitating conditions of the school, the human resources factor (teachers, management team, classmates) is the one that has the greatest influence on the students' decisions regarding the intention to undertake ESL. On the other hand, the impact of the school's functional and material resources was not found to be statistically significant. These results coincide with the findings of Tarabini et al. (2018), who highlight the importance of the attention and pedagogical support of teachers, tutors, counsellors, the management team and peers themselves as key resources for influencing students' attitudes and educational decisions.

Regarding the moderating variables considered in the study, as in other studies (Bayón-Calvo et al., 2020; Cardwell et al., 2023; Ministry of Education and Vocational Training, 2023), gender and age have a significant effect on school decisions, expectations and outcomes.

For example, women's intention to drop out is significantly lower than men's. We also found a direct relationship between age and intention to drop out. We also found a direct relationship between age and intention to drop out, with a significant influence on students aged 18 and over. A possible explanation for this result is to be found in the repetition of school years, a variable with an important level of influence on the intention to drop out. In agreement with other authors (Cerdà et al., 2020), these data invite us to think that repetition is not only an unfavourable predictor of early dropout, but also that it is not useful as a strategy to increase student performance.

These same variables also explain differences in the different cognitive factors studied (perceived usefulness, perceived ease and perceived self-efficacy), as well as in those related to the socio-educational context (subjective norm) and the center itself where the educational activity takes place (functional resources, material resources). The results obtained invite us to continue reflecting on the differences in the belief systems and attitudes of boys and girls towards school, teachers, school work and learning, making clear the strength of subjectivity and the role played by the construction of masculinity and femininity among the adolescent population (Salas-Rodríguez, 2022).

On the other hand, the significant influence of students' school history on their intention to drop out is confirmed. In this case, the results coincide with those obtained in other similar studies (Conde et al, 2023; González-Rodríguez et al., 2019; López-Aguilar et al, 2023; Montero-Sieburth & Turcatti, 2022), highlighting

the important effects of the schooling program and grade repetition. In this case, it is worth noting that students enrolled in non-routine pathways have a high dropout intentionality. Possibly, this is due to the fact that the criteria adopted for this organization generate feelings of frustration and demotivation that can lead to dropping out of the educational system (Cerdà, et al., 2020). Similarly, a significant influence of these variables (pathway and repetition) is observed on internal student factors such as ease and perceived self-efficacy.

In sum, since these results we can conclude that the phenomenon of ESL is a complex and multidimensional problem. The factors that explain it are many and affect it in different ways depending on the individual characteristics of the students and their own educational reality. In this study, the usefulness attributed to the study activity, the perceived relative ease of obtaining the academic degree and the conditions posed by the immediate context are key factors for understanding and intervening on the intention of ESL. In this sense, it seems appropriate to help students to become aware of the usefulness and deep meaning of the educational task, while promoting positive motivational beliefs about the value of effort in order to successfully face valuable and challenging educational goals.

LIMITATIONS OF THE STUDY AND FUTURE LINES OF RESEARCH.

Although it is possible to consider that the instrument designed provides reliable measures with which to make valid inferences, the results obtained suggest that some of the items that make up the scales could be improved. This is because their factor loadings are small and the error variances show a high proportion of the variance that does not covary with the factor (see, for example, item NSUB1).

It is also worth considering the risk of random, inattentive or effortless responses in a self-administered survey. Although no multivariate outliers were identified in the participant sample, it is important to recognize that there is always a degree of uncertainty related to the validity and reliability of the data collected with this type of survey. In this sense, it would be interesting to complement these results with interviews or focus groups, to better understand the conceptions and positions of young adolescents in relation to ESL.

On the other hand, although in this study an adaptation of the model designed by Venkatesh et al. (2003) has been proposed as a research model, in which all the effects are considered as direct, in order to enrich the analysis a model with indirect effects could be proposed, such as, for example, the influence of perceived self-efficacy on ease or that of the subjective norm on usefulness, among others. Likewise, although the model is statistically acceptable, some of the evaluated relationships are not corroborated, such as the effect of self-efficacy or the subjective norm on the intention of ESL. Therefore, the incorporation of variables identified in

other research, such as aspects attributable to the individual (e.g. skills, health) or issues linked to educational policies and practices in schools (e.g. coexistence policy, measures to address diversity, methodological strategies) is proposed (Romero-Sánchez & Hernández-Pedreño, 2019) (Romero-Sánchez & Hernández-Pedreño, 2019). This would allow us to test its effect and rule out specification errors in the proposed model due to the omission of relevant variables. Finally, another line of future work envisaged is the extension of the study to other territories to analyze possible differences according to contexts and regions.

ACKNOWLEDGEMENTS

This research has been partially funded through the University of La Rioja's own research plan (ATUR 2021/2022). The authors would also like to thank the Regional Ministry of Education of the Government of La Rioja for their collaboration.

REFERENCES

- Allen, B., & Waterman, H. (2019). *Etapas de la adolescencia*. Healthy Children. <https://www.healthychildren.org/Spanish/ages-stages/teen/Paginas/Stages-of-Adolescence.aspx>
- Bayón-Calvo, S., Corrales, H., & De Witte, K. (2020). Assessing regional performance against early school leaving in Spain. *International Journal of Educational Research*, 99, 101515. <https://doi.org/10.1016/j.ijer.2019.101515>.
- Bayona-i-Carrasco, J., & Domingo, A. (2021). La continuidad en el aula: el caso del alumnado de origen inmigrante en la transición hacia la educación posobligatoria en Cataluña. *Aposta. Revista de Ciencias Sociales*, 89, 123-141. <https://n9.cl/owvo5>
- Casanova, J. R., Fernández-Castañón, A. C., Pérez, J. C., Gutiérrez, A., & Almeida, L. S. (2018). Abandono no Ensino Superior: impacto da autoeficácia na intenção de abandono. *Revista Brasileira de Orientação Profissional*, 19(1), 41-49.
- Cerdà, A., Sureda, I., & Salvá, F. (2020). Intención de abandono durante el primer curso de formación profesional de grado medio. *Estudios sobre Educación*, 39, 35-57. <https://doi.org/10.15581/004.39.33-57>
- Cardwell, S. M., Mazerolle, L., Luengen, K., & Bennett, S. (2023). The effects of a truancy reduction program on antisocial behavior: age, race, and sex differences. *Justice Evaluation Journal*, 6(1), 108-128. <https://doi.org/10.1080/24751979.2022.2135453>

- Chen F. (2007) Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural Equation Modeling*, 14, 464-504. <https://doi.org/10.1080/10705510701301834>
- Chin, W. W. (1998). The partial least squares approach to structural equation modelling. In G. A. Marcoulides (Ed.), *Modern methods for business research* (pp. 295-358). Lawrence Erlbaum Associates.
- Conde, S., García-Rodríguez, M. P., & Toscano Cruz, M. O. (2023). Riesgo de abandono escolar: ¿cómo influyen las características sociofamiliares percibidas por lo estudiantes sobre sus actitudes y comportamiento en el aula? *Educación XX1*, 26(2), 267-298. <https://doi.org/10.5944/educxx1.33279>
- Dunn, T.J., Baguley, T., & Brunsdén, V. (2014). From alpha to omega: a practical solution to the pervasive problem of internal consistency estimation. *British Journal of Psychology*, 105, 399-412. <https://doi.org/10.1111/bjop.12046>
- Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 53(1), 109-132.
- European Education and Culture Executive Agency. (2019). *Key data on early childhood education and care in Europe: 2019*. Publications Office. <https://data.europa.eu/doi/10.2797/894279>
- Estalella, A. (2022). *Ética de la Investigación para las ciencias sociales*. Universidad Complutense de Madrid.
- González-Rodríguez, D., Viera M. J., & Vidal, J. (2019). La percepción del profesorado sobre las variables que influyen en el abandono escolar temprano. *Revista de Investigación Educativa*, 37(1), 181-200. <https://doi.org/10.6018/rie.37.1.343751>
- Hair, J., Black, W. C., Babin, B., & Anderson, R. (2010). *Multivariate Data Analysis*. Pearson.
- Hair, J., Ringle, C., & Sarstedt, M. (2011). PLS-SEM: indeed a silver bullet. *Journal of Marketing Theory and Practice*, 19(2), 139-151. <https://doi.org/10.2753/MTP1069-6679190202>
- Hamid, M., Sami, W., & Mohamad, M. H. (2017). Discriminant validity assessment: use of Fornell & Larcker criterion versus HTMT criterion. *Journal of Physics: Conference Series*, 890. <https://doi.org/10.1088/1742-6596/890/1/012163>
- Henseler, J., Ringle, C., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115-135. <https://doi.org/10.1007/s11747-014-0403-8>
- Herbas, B., & Rocha, E. (2018). Metodología científica para la realización de investigaciones de mercado e investigaciones sociales cuantitativas. *Perspectivas*, 42. <https://n9.cl/bk153>
- Instituto Nacional de Estadística. (10 mayo 2022). *Encuesta de Población Activa*. <https://www.ine.es/>

- Kline, R. (2016). *Principles and practice of structural equation modeling*. The Guilford Press.
- Lloret, S., Ferreres, A., Hernández-Baeza, A., & Tomás, I. (2014). El análisis factorial exploratorio de los ítems: una guía práctica. *Anales de Psicología*, 30(3), 1151-1169. <https://dx.doi.org/10.6018/analesps.30.3.199361>
- López-Aguilar, D., Álvarez-Pérez, P. R., González-Ramos, J. A., & Garcés-Delgado, Y. (2023). El desarrollo de conductas resilientes en la lucha contra el abandono académico universitario. *Educación XX1*, 26(2), 91-116. <https://doi.org/10.5944/educx1.35891>
- Ministerio de Educación & Formación Profesional. (22 febrero 2023). *La tasa de abandono temprano en 2022*. <https://n9.cl/5nhi6>
- Moeller, J., Viljaranta, B., & Kracke, J. (2020). Disentangling objective characteristics of learning situations from subjective perceptions thereof, using an experience sampling method design. *Frontline Learning Research*, 8(3) (2020), 63-84. <https://doi.org/10.14786/flr.v8i3.529>
- Montero, M., & Turcatti, D. (2022). Preventing disengagement leading to early school leaving: pro-active practices for schools, teachers and families. *Intercultural Education*, 33(2), 139-155. <https://doi.org/10.1080/14675986.2021.2018404>
- Muñoz-Moreno, J., & Díaz-Vicario, A. (2022). Hacer frente al abandono temprano desde la implicación del entorno. In J. Gairín & P. Olmos (Eds), *Disminuir el abandono escolar y mejorar la persistencia* (pp. 101-120). Narcea.
- Olmos, P., & Gairín, J. (2022). El abandono en la escolaridad postobligatoria. In J. Gairín & P. Olmos (Eds.), *Disminuir el abandono escolar y mejorar la persistencia* (pp. 53-66). Narcea.
- Organización Mundial de la Salud. (2021). *Salud mental del adolescente*. <https://n9.cl/8pv0>
- Revelle, W. (2021). *Psych: procedures for psychological, psychometric, and personality research*. Northwestern University, Evanston, Illinois. R package version 2.1.9.
- Romero-Sánchez, E., & Hernández-Pedreño, M. (2019). Análisis de las causas endógenas y exógenas del abandono escolar temprano: Una investigación cualitativa. *Educación XX1*, 22(1), 263-293. <https://doi.org/10.5944/educXX1.21351>
- Rosseel, Y. (2012). lavaan: an R package for structural equation modeling. *Journal of Statistical Software*, 48(2), 1-36. <https://doi.org/10.18637/jss.v048.i02>
- Salas-Rodríguez, J., Gómez-Jacinto, L., Hombrados, I., & Del Pino, N. (2022). Applying an evolutionary approach of risk-taking behaviors in adolescents. *Frontiers in Psychology*, 12. <https://doi.org/10.3389/fpsyg.2021.694134>
- Suberviola I., Nalda, F., & González-Marcos, A. (2023). *Descripción del cuestionario sobre abandono escolar temprano*. CAET. <https://doi.org/10.6084/m9.figshare.22104749.v2>

- Sánchez-Alhambra, A. (2017). *Aspectos académicos y personales que inciden en el abandono escolar temprano en Educación Secundaria Obligatoria*. [Tesis doctoral. Universidad Complutense de Madrid]. <https://eprints.ucm.es/42407/1/T38717.pdf>
- Schunk, D. H., & DiBenedetto, M. K. (2020). Motivation and social cognitive theory. *Contemporary Educational Psychology, 60*. <https://doi.org/10.1016/j.cedpsych.2019.101832>
- Svetina, D., Rutkowski, L., & Rutkowski, D. (2020). Multiple-group invariance with categorical outcomes using updated guidelines: an illustration using Mplus. *Structural Equation Modeling, 27*(1), 111-130. <https://n9.cl/w6hox>
- Tarabini, A., Curran, M., & Montes, A. (2019). Can educational engagement prevent early school leaving? Unpacking the school's effect on educational success. *Educational Studies, 45*(2), 226-241. <https://doi.org/10.1080/03055698.2018.1446327>
- Ursachi, G., Horodnic, I. A., & Zait, A. (2015). How reliable are measurement scales? External factors with indirect influence on reliability estimators. *Procedia Economics and Finance, 20*, 679-686. [https://doi.org/10.1016/S2212-5671\(15\)00123-9](https://doi.org/10.1016/S2212-5671(15)00123-9)
- Venkatesh, V., Morris, M., Davis, G., & Davis, F. (2003). User acceptance of information technology: toward a unified view. *MIS Quarterly, 425-478*. <https://doi.org/10.2307/30036540>
- Vera, A., Cerda, G., Aragón, E., & Perez-Wilson, C. (2021). Rendimiento académico y su relación con variables socioemocionales en estudiantes chilenos de contextos vulnerables. *Educación XX1, 24*(2), 375-398. <https://doi.org/10.5944/educxx1.28269>