



Psychometric analysis of a scale to measure university dropout intention: A pilot study

Análisis psicométrico de una escala para medir la intención de deserción universitaria: un estudio piloto

✉ **Aarón-Javier Euan-Catzin**

Universidad Autónoma de Yucatán
México

<https://orcid.org/0000-0001-6119-0352>
euan.aaron@outlook.com

Pedro-José Canto-Herrera

Universidad Autónoma de Yucatán
México

<https://orcid.org/0000-0001-5428-8343>
pcanto@correo.uady.mx

Received: 05-10-2025

Accepted: 03-11-2025

Published: 20-11-2025

How to cite this article:

Euan-Catzin, A. J., & Canto-Herrera, P. J. (2026). Psychometric analysis of a scale to measure university dropout intention: A pilot study. *Revista Panamericana de Pedagogía*, 41, e3588. <https://doi.org/10.21555/rpp.3588>

Abstract

This study, conducted in Yucatán, Mexico, aims to translate and analyze some psychometric properties of the Scale to Measure Dropout Intention developed by Bäumle et al. (2022). An instrumental, cross-sectional, and correlational pilot study was conducted with 71 students from various programs at universities in the state of Yucatán. The instrument was translated into Spanish with the assistance of an expert, and preliminary convergent validity was assessed. Reliability was estimated using Cronbach's alpha and McDonald's omega. The results show positive and statistically significant correlation with the five dimensions of the instrument: non-fit perception ($r = .394$; $p < .05$), thoughts of quitting ($r = .313$; $p < .05$), deliberation ($r = .320$; $p < .05$), information search, and final decision, as well as with the total score of the scale ($r = .394$; $p < .05$). Negative and statistically significant correlations were observed with motivation and academic self-efficacy. The instrument demonstrated adequate internal consistency across all its dimensions ($\alpha = .843 - .997$; $\omega = .849 - .996$) and for the overall scale ($\alpha = .973$; $\omega = .978$). These results

Este trabajo está bajo una licencia Creative Commons Attribution 4.0 International (CC BY 4.0).



provide valuable insights for guiding measurement of the phenomenon in this context and highlight the importance of conducting future research with large, more diverse samples.

Keywords: Drop out; Higher education; Measurement; Reliability, Validity.

Resumen

El presente estudio, realizado en Yucatán, México, tiene el objetivo de traducir y analizar algunas propiedades psicométricas de la Escala para medir la intención de deserción de Bäumle et al. (2022). Se realizó un estudio piloto instrumental, transversal y correlacional con 71 estudiantes de diversas carreras de universidades del estado de Yucatán. El instrumento se tradujo al español con apoyo de un experto y se evaluó preeliminarmente la validez convergente. La confiabilidad se estimó con el alfa de Cronbach y el Omega de McDonald. Los resultados muestran correlaciones positivas y estadísticamente significativas con las cinco dimensiones del instrumento: percepción de no encajar ($r = .406$; $p = < .001$), pensamientos sobre desertar ($r = .476$; $p = < .001$), análisis ($r = .544$; $p = < .001$), búsqueda de información ($r = .540$; $p = < .001$) y decisión final ($r = .473$; $p = < .001$), así como con la puntuación total ($r = .570$; $p = < .001$). Se observan correlaciones inversas y estadísticamente significativas con la motivación ($r = -.326$; $p = < .01$) y la autoeficacia académica ($r = .436$; $p = < .001$). El instrumento muestra una consistencia interna adecuada en todas sus dimensiones ($\alpha = .829 - .969$; $\omega = .827 - .970$) y la escala general ($\omega = .959$). Los resultados son valiosos para orientar la medición del fenómeno en el contexto y muestran la pertinencia de realizar futuras investigaciones que consideren muestras de mayor tamaño y diversidad.

Keywords: Confiabilidad; Deserción escolar; Enseñanza superior; Medición; Validez.

INTRODUCTION

Dropout rates in higher education are a relevant issue due to both their prevalence and consequences. It is estimated to reach up to 24% internationally and in some specific regions, it can double (Organization for Economic Cooperation and Development [OECD], 2024). Its consequences range from individual effects, such as low self-esteem or loss of a sense of belonging, to broader social implications, such as institutional economic losses or an increase in social inequality (Bonilla-Jurado et al., 2023; Miño, 2021; OECD, 2010, 2024; Poveda-Aguja et al., 2023; Sosu and Pheunpha, 2019).

The above shows the importance of studying the factors that precede the phenomenon, as this would allow implementing actions to prevent it. In this context, the study of dropout intention is important (Findeisen et al., 2024). Dropout intention refers to the thoughts or considerations of a student to permanently interrupt their studies before obtaining a university degree (López-Angulo et al., 2021; Muñoz-Inostroza et al., 2024). Thus, when dealing with a phase prior to dropout, it becomes an early warning sign, facilitating the timely implementation of institutional strategies to prevent or reduce

it (Aarkrog et al., 2018; Findeisen et al., 2024; Krötz and Deutscher, 2021). Furthermore, the study is more feasible, as it can be conducted with students who are still part of the educational system, thereby facilitating access to them (Findeisen et al., 2024).

Measuring the intention to drop out

The study of dropout intention is a key aspect to understanding real attrition. However, one of its main challenges lies in its measurement (Findeisen et al., 2024; Muñoz-Inostroza et al., 2024). First, it is common to use instruments that assess the phenomenon through a single question (Balta-Salvador et al., 2022; Bargmann et al., 2022; Bernardo et al., 2022b; Campos-Muñoz et al., 2024; Ko et al., 2023; Toyon, 2023; Yildirim et al., 2021), which can limit a deep understanding of the phenomenon. Second, some instruments, although they assess the construct with a multi-item scale, indiscriminately measure the intention to drop out of studies and the intention to change majors, even though these are conceptually distinct phenomena (Bohndick, 2020; Cobo-Rendón et al., 2023; Eknornes, 2022; Galve-González et al., 2024; Schnettler et al., 2020). Third, few existing instruments are psychometrically validated; a systematic review on the subject identified only six instruments with these characteristics (Muñoz-Inostroza et al., 2024). In this regard, several studies appear to measure the intention to drop out using items created for this purpose or with scales of related variables (Sáenz et al., 2020), which indicates an important limitation on the validity of the measurement of the phenomenon. There are also few instruments that specify the conceptual or operational definition of the phenomenon; in this regard, in a recent systematic review prepared by Muñoz-Inostroza et al. (2024), only one instrument was identified that explicitly defined the intention to drop out, developed by Bäumle et al. (2022). Finally, psychometrically validated instruments usually use related terms that do not necessarily refer directly to the intention to desert, such as permanence or risk of dropping out (Muñoz-Inostroza et al., 2024).

In Mexico, these limitations are accentuated, since the study of the phenomenon in this context is scarce, not only in terms of the number of studies on the subject, but also in the availability of instruments to measure the construct. In this regard, recent systematic reviews on the phenomenon have not identified any studies conducted in the country (Sáenz et al., 2020; Véliz-Palomino and Ortega, 2023), nor have they identified any instruments developed in this context (Muñoz-Inostroza et al., 2024).

For the present study, only one validated scale was identified in the country: the Frostad et al. (2015) Intention to Leave Scale, cited by Jacobo-Galicia et al. (2021). This is a six-item, seven-level Likert-type scale ranging from 1 = strongly disagree to 7 = strongly agree. Some items are contextualized within specific reasons (e.g., “I often think about leaving this school because the subjects are very theoretical” or “I often think about leaving school because of the constant conflicts I have with my teachers”). Regarding reliability and consistency, the referenced study reported factor loadings between 0.680 and 0.808, with t-values greater than 1.96; Cronbach’s alpha and composite reliability exceeded the cutoff of 0.70, and the variance extracted exceeded 0.50, thus demonstrating convergent validity. Therefore, despite having adequate psychometric characteristics, the focus on specific motives limits its use for measuring the phenomenon globally.

Motivation, academic self-efficacy, and intention to drop out

The intention to drop out is a complex, multifactorial phenomenon, for which numerous intervening psychological, academic, institutional, economic, and social variables exist (Véliz-Palomino & Ortega, 2023). In particular, motivation and academic self-efficacy have been associated with the intention to drop out (Buizza et al., 2024).

Regarding academic motivation, the literature provides evidence of both direct and indirect relationships with the intention to drop out. Specifically, intrinsic motivation has been found to be inversely related to the intention to drop out (Baalmann et al., 2024; Buizza et al., 2024; Passeggia et al., 2023). This relationship appears particularly interesting among first-year students (Passeggia et al., 2023); furthermore, some studies have shown that intrinsic motivation is a strong predictor of dropout intention (Rump et al., 2017). Likewise, it has been observed that learning motivation is one of the causes related to reasons for academic abandonment (Satico-Ferraz et al., 2021) and that it is also associated with student retention (Díaz-Mujica et al., 2019; Girelli et al., 2018), with studies showing that greater intrinsic motivation is associated with increased intention to remain in the program (Díaz-Mujica et al., 2019). In addition to these direct effects on dropout intention, intrinsic motivation also appears to be indirectly related, as it mediates between variables such as self-efficacy and dropout intention (Buizza et al., 2024).

Along these same lines, the literature shows a direct and indirect connection between self-efficacy and dropout intention (Alves-Fior et al., 2022; Buizza et al., 2024). As with motivation, the relationship between these variables is inverse: students with a high sense of self-efficacy are less likely to drop out (Achtziger & Gollwitzer, 2018; Buizza et al., 2024; Morelli et al., 2023). Regarding the indirect relationship, the literature indicates that academic self-efficacy mediates the relationship between dropout and other variables, such as self-regulated learning, commitment, and cognitive and motivational variables (Bernardo et al., 2025). In addition, some studies have found that academic self-efficacy is strongly associated with academic retention (Barrientos-Illanes et al., 2021; Díaz-Mujica et al., 2019; Morelli et al., 2023; Robbins et al., 2004) and with intrinsic motivation. They increase the intention to remain when they also present positive values (Díaz-Mujica et al., 2019).

Objectives of the present study

Taking into account the limitations regarding the characteristics of instruments for measuring dropout intention, the scarcity of validated instruments, and the limited number of studies on the topic conducted in Mexico, this study aims to translate and analyze some psychometric properties of a scale for measuring the dropout intention of university students in the Mexican context through a pilot study. This pilot study is the first part, or preliminary phase, of a larger study that seeks to validate the scale. The instrument analyzed refers to the Scale to Measure Dropout Intention by Bäumle et al. (2022), specifically the dropout intention subscale, since its characteristics overcome some of the most common limitations of existing instruments, such as the use of multiple items, the distinction between intention to drop out and intention to change careers, and a theoretical

approach that is not functional. This study is grounded in evidence and seeks to contribute to the proper and contextualized study of the phenomenon. In particular, the present study focused on three objectives:

1. Translate the instrument into Spanish and check its clarity.
2. Analyze its reliability using Cronbach's alpha and McDonald's omega.
3. Measure convergent external validity through correlation with an instrument previously validated in Mexico (Jacobo-Galicia et al., 2021) and with theoretically related constructs such as academic motivation and self-efficacy.

METHODOLOGY

Type of study

A quantitative pilot study was conducted with an instrumental, non-experimental, cross-sectional, retrospective, and correlational design, as it analyzes the psychometric aspects of a scale, collects data at a single point in time, does not directly manipulate the variables, and seeks the association between them without identifying a causal relationship (Ato-García & Vallejo-Seco, 2015; Ato-García et al., 2013; Creswell, 2012).

Participants

A total of 71 university students from different majors and semesters participated in the study. These students came from two private and one public higher education institution in the state of Yucatán. Eighty-seven percent of the participants were women ($n = 60$), and 13% were men ($n = 9$), with a mean age of 21.6 years (95% CI = 20.5–22.6; SD = 4.35), ranging from 18 to 50 years. Regarding their fields of study, 62% were in education ($n = 18$), 11.3% in educational intervention ($n = 8$), 9.9% in international relations ($n = 7$), 5.6% in psychology ($n = 4$), 5.6% in educational psychology ($n = 4$), and 5.6% in English language teaching ($n = 4$). Regarding grade level, the majority were in their third semester (36.6%; $n = 26$), followed by eighth semester (29.6%; $n = 21$), and seventh semester students (29.6%; $n = 21$), third (18.3%; $n = 13$), second (5.6%; $n = 4$), fourth (4.2%; $n = 3$), fifth (2.8%; $n = 2$) and sixth (2.8%; $n = 2$).

Instruments

The following instruments were used to measure the intention to drop out:

- **Scale to Measure Dropout Intention by Bäumle et al. (2022).** This scale is the instrument that has been translated and on which indicators of external validity have been measured. The instrument consists of two subscales: one on the intention to drop out and another on the intention to change majors. In this study, only the subscale related to dropout intention was validated and translated. It comprises five dimensions, each with three items: perception of not fitting in, thoughts regarding desertion, deliberation, information search, and final decision. It uses a Likert-type

scale with six response options ranging from 1 = completely disagree to 6 = completely agree. The original instrument is in German; however, the authors provide their own English translation. The original study reported an adequate construct validity ($\chi^2 = 422.7$; $df = 80$; $p < .001$; $RMSEA = 0.07$; $CFI = 0.98$; $TLI = 0.97$; $SRMR = 0.05$). Regarding reliability, all dimensions showed adequate internal consistency: perception of non-adjustment ($\alpha = .85$), thought of abandonment ($\alpha = .80$), analysis ($\alpha = .94$), information search ($\alpha = .92$), and final decision ($\alpha = .95$).

- **Frostad et al. (2015) Intention to Leave Scale in Jacobo-Galicia et al. (2021).** This instrument was used to assess the scale's convergent validity, developed by Bäumle et al. (2022). It consists of six items and seven response levels (1 = strongly disagree, 7 = strongly agree). It includes items contextualized around specific reasons (e.g., "I often think about leaving this school because the subjects are very theoretical" or "I often think about leaving school because of the ongoing conflicts I have with my teachers"). Validation data in Mexico showed adequate psychometric properties (factor loadings between .680 and .808; $t > 1.96$; $\alpha > .70$ and extracted variance $> .50$).

To assess other aspects of external validity by correlating with theoretically related constructs, the following scales were used.

- **Self-efficacy in Academic Behaviors Scale (EACA) by Blanco et al. (2011).** This instrument measures academic self-efficacy and was developed by Blanco et al. (2011). The instrument consists of a 13-item Likert-type scale that is responded on a numerical scale from 0 to 10, which represents the frequency with which participants perform the mentioned actions. The instrument was validated by Peinado et al. (2012) and reported a satisfactory fit ($\chi^2 = 359.242$; $df = 140$; $p < .01$; $GFI = .953$; $NFI = .940$; $CFI = .962$; $RMSEA = .038$; $AIC = 443.242$). Regarding reliability, the scale showed an $\alpha > .75$.
- **Achievement Goals Tendencies Scale by Hayamizu and Weiner (1991).** In particular, the goal-oriented subscale was used. This subscale consists of 6 items, with a response scale ranging from 1 to 5 (1 = Never; 5 = Always). The instrument has been validated in Mexico by Gaeta et al. (2015). The study showed a good fit ($\chi^2 = 737.09$; $p < .001$; $CFI = .94$; $BBNNFI = .94$; $RMSEA = .05$).

Procedure

The pilot study was conducted in three phases, which are described below:

Phase 1: Translation into Spanish

The first phase consisted of translating the scale from English to Spanish. Considered the translation of German to English carried out by the authors themselves. The Spanish-language translation was evaluated and validated by a teacher from the English language teaching at the Faculty of Education of the Autonomous University of Yucatán. For the above, the teacher was asked to indicate, along with the translation of each item, on an instrument developed *ad hoc* by the researchers, the degree to which the translation maintained the original meaning and semantic agreement of the items. The instrument

was answered on a scale from 0 (does not preserve the original meaning at all) to 3 (conserves and adapts the entire original meaning).

Phase 2: In-person data collection

The instrument was administered in two modalities (print and online) to evaluate which was most appropriate for the collection process.

In this second phase, the instruments were administered in printed format to students from one private institution and one public institution. This phase was further divided into two stages:

First, the instrument was applied to a group of eighth-semester students from the private institution, who, in addition to answering the instrument, also provided feedback on it. In this regard, once the students answered the instruments, they were asked to comment on how clear the questions were, if the instrument contained words they did not understand or that were unfamiliar to them, if the sentences had a fluid and coherent structure, and if they had any difficulty with the instrument's length. The above was done to identify areas for improvement in the instrument and to verify whether the Spanish translation was adequate before applying the instrument to the remaining students in the larger study to be carried out later.

In a second stage, the instruments were administered to the remaining students in the institutions, but they were not asked for feedback; they were only asked to complete the instruments. At this stage, the instruments were also applied in printed format.

The general procedure for implementation in this phase consisted of coordinating with the institution, then going to the students' classroom to explain the objective of the pilot study and its activities. Before beginning, the informed consent form was read and explained to the students as a group. Only the students who signed the document participated in the project. These participants then responded individually to the instruments.

Phase 3: Online Collection

In this phase, the online version of the questionnaire was administered to the students of the second private institution. For this phase, an online form was created in Microsoft Forms using items from both instruments. The informed consent form was placed before the questionnaire, so only those who had given their consent had access to it. The online form was shared with various student groups through their subject teachers.

Data analysis

For the reliability analysis of the Baulke et al. (2022) scale, the internal consistency of the instrument was calculated using Cronbach's alpha and McDonald's omega for each of the five dimensions. For the overall scale score, only McDonald's omega was calculated, since Cronbach's alpha is not recommended for multidimensional scales.

Regarding convergent validity, a Spearman correlation was performed between the scores of both instruments since the assumption of normality was not met for any of the

scales' dimensions. The correlation was performed for each dimension and for the overall score of Bäumke et al.'s (2022) dropout intention scale and the total score of the dropout intention scale by Jacobo-Galicia et al. (2021).

Finally, a Spearman correlation was also performed between dropout intention, motivation, and academic self-efficacy. Given the documented relationship between these constructs in the literature, a Spearman correlation was used because the data did not follow a normal distribution for any of the constructs.

All analyses were performed using Jamovi version 2.7.6.0.

ANALYSIS

Characteristics of the translation

Regarding the translation's clarity, the participants indicated they understood. They correctly answered the questions and did not find any terms or words outside their scope of vocabulary. In addition, they indicated that the sentence structure was clear and allowed for a fluid, natural reading. Regarding the length of the instrument, participants did not consider that the number of questions affected their responses or motivation to answer. Therefore, although the objective of this exercise was to improve the instrument before its subsequent application, it was not necessary to make corrections to it.

On the other hand, some participants indicated difficulty differentiating items from certain dimensions. Regarding this, they indicated that the items appear to be the same. Specifically, items 1 and 2 of the dimension of search for information and items 2 and 3 of the final decision dimension.

Reliability

Regarding reliability, Cronbach's alpha and McDonald's omega were calculated for the instrument's five dimensions, and McDonald's omega for the total scale. The analysis showed that the Bäumke et al. (2022) scale has good internal consistency across the five dimensions that comprise the instrument: perception of not fitting in ($\alpha = .873$; $\omega = .877$), thoughts of dropping out ($\alpha = .763$; $\omega = .827$), deliberation ($\alpha = .858$; $\omega = .863$), information search ($\alpha = .858$; $\omega = .862$), and final decision ($\alpha = .969$; $\omega = .970$). Similarly, the results showed adequate internal consistency for the overall scale ($\omega = .959$), as can be seen in Table 1. Additionally, the item-total correlations for the dimensions were analyzed to determine whether increasing α by removing any items was possible. In this regard, only the dimension of thoughts about dropping out showed a significant increase in Cronbach's alpha when the first item of the dimension (corresponding to item 4 of the instrument) was removed, which increases confidence in the dimensionality with an $\alpha = .829$ and $\omega = .850$.

Table 1*Results of the internal consistency of the scale dimensions*

Dimensions	Cronbach's α	McDonald's ω
Perception of not fitting in	.873	.877
Thoughts about dropping out	.764	.827
Deliberation	.858	.863
Information search	.858	.862
Final decision	.969	.970
Total dropout intention	N/A	.959

Nota: N/A = No aplica

Note: N/A = Not applicable

Convergent validity

Correlation with previously validated scale

Regarding convergent validity, a Spearman correlation was first performed between the two scales that measure dropout intention since the assumption of normality was not met for any of the dimensions of the dropout intention scale: perception of not fitting in ($W = 0.660$; $p < .001$), thoughts about dropping out ($W = 0.720$; $p < .001$), deliberation ($W = 0.615$; $p < .001$), information search ($W = 0.621$; $p < .001$) and final decision ($W = 0.350$; $p < .001$) and the total scale ($W = 657$; $p = .001$).

The analyses showed a positive and statistically significant correlation between the five dimensions of the instrument by Bulke et al. (2022) and the scale by Jacobo-Galicia, et al. (2021): perception of not fitting in ($r = .406$; $p < .001$), thoughts about deserting ($r = .476$; $p < .001$), deliberation ($r = .544$; $p < .001$), information search ($r = .540$; $p < .001$), final decision ($r = .473$; $p < .001$), as well as among the total scores ($r = .570$; $p < .001$) as shown in Table 2. Regarding the magnitude of the correlations, the results show moderate correlations for the dimensions of perception of not fitting in, thoughts of quitting, and final decision, and strong correlations in the dimensions of deliberation, information search, and total scale scores. The magnitudes of the correlations were determined using the criteria proposed by Cohen (1988).

Table 2*Correlaci3n entre las escalas de intenci3n de deserci3n*

Intention to Drop Out (Bulke et al., 2022)	Intention to Leave (Jacobo-Galicia et al., 2021)			
	r	gl	p	Effect size
Perception of not fitting in	0.406	68	<.001	Moderate
Thoughts about dropping out	0.476	68	<.001	Moderate
Deliberation	0.544	68	<.001	Strong
Information search	0.540	68	<.001	Strong
Final decision	0.473	68	<.001	Moderate
Total dropout intention	0.570	68	<.001	Strong

Correlation with theoretically related constructs

To assess convergent validity with related constructs, correlations were computed among academic motivation, academic self-efficacy, and dropout intention. A Spearman correlation was conducted among the variables, as the assumption of normality was not met for any of them: academic motivation ($W = 0.862$; $p < .001$), academic self-efficacy ($W = 0.946$; $p < .01$), and dropout intention ($W = 0.657$; $p < .001$).

In this regard, a statistically significant inverse correlation was observed between motivation and intention to drop out ($r = -.326$; $p < .01$), showing that greater academic motivation is associated with a lower intention to drop out (Table 3). In line with Cohen's (1988) parameters, the correlation between the constructs is moderate, though at the lower limit, suggesting a weak correlation.

Likewise, the results showed an inverse correlation and statistically significant relationship between academic self-efficacy and dropout intention ($r = -.436$; $p < .001$), that is, with greater self-efficacy, there is a lower dropout intention (Board3). Regarding magnitude, the results show a moderate correlation between the constructs, consistent with Cohen's (1988) levels.

Table 3

Correlations between dropout intention, motivation, and academic self-efficacy

	Dropout intention		
	r	gl	p
Academic motivation	-.326	66	<.01
Total intention to dropout	-.436	67	<.001

DISCUSSION

The present pilot study aimed to translate and analyze the external validity of the scale for measuring dropout intention by Bülke et al. (2022) through correlation with a previously validated scale and with other theoretically related constructs, taking into account that instruments to measure this phenomenon are scarce both in the region and in Mexico, and its characteristics overcome some limitations of existing instruments by distinguishing between intention to drop out and intention to drop out, change of major tension, as well as measuring it through various items and being based on a solid and clear theory.

The first objective, related to the translation of the instrument, was carried out with the help of a language expert, and its clarity was reviewed by a group of students. The results showed that the translation was adequate. The wording was clear for the students, allowing them to read naturally and fluently. One aspect mentioned by some students was that items 1 and 2 of the search information dimension, and items 2 and 3 of the final decision dimension, were very similar. However, it is recommended to retain all items on

each scale for their theoretical relevance and to maintain balance in the number of items across the dimensions. In this regard, it is also important to consider the limited sample size of the participants in this process.

Regarding the second objective on reliability, the pilot study showed internal consistency similar to that reported in the original study. The original study reported alpha values between .80 and .95 (Bäulke et al., 2022), whereas in the present study, the values ranged from .829 to .970 (after item 1 is removed from the thoughts-about-deserting dimension). Considering this is a pilot study, it is recommended to retain the item in future studies to corroborate whether this result is maintained or changes when analyzing the instrument's properties with a larger number of participants.

Regarding the objective related to convergent validity through the relationship with another previously validated dropout intention instrument, the results showed a correlation between the five dimensions and the total score of the instrument by Bäulke et al. (2022) and the dropout intention scale validated by Jacobo-Galicia et al. (2021). These findings suggest that the scale by Bäulke et al. (2022) provides preliminary evidence of convergent validity for measuring dropout intention among local university students; however, these results should be interpreted with caution, given the study's limited sample size. On the other hand, the results of this first psychometric analysis of the scale support the continued exploration of the instrument's validity in future research.

Regarding convergent validity across theoretical constructs, the findings showed a statistically significant inverse correlation between Academic motivation and intention to drop out, consistent with the original study that developed the instrument, which found a negative association between motivational variables and dropout intention (Bäulke et al., 2022). This relationship is further supported by other studies reporting direct and indirect effects between these variables (Baalmann et al., 2024; Buizza et al., 2024; Ferraz et al., 2021; Passeggia et al., 2023). The results of this study also showed an inverse correlation and a statistically significant relationship between academic self-efficacy and dropout intention, consistent with other studies that have established a negative association between these variables (Achtziger and Gollwitzer, 2018; Buizza et al., 2024; Morelli et al., 2023).

Additionally, it is important to highlight the instrument's general characteristics. In this regard, the Bäulke et al. (2022) scale was constructed based on a cognitive model of decision-making, so that the intention to drop out is conceived as a process that goes from contemplating dropping out to the final decision to desert. These aspects are further corroborated in the instrument's validation study. These aspects differ from the characteristics of other existing instruments for measuring the phenomenon, which typically lack a clear conceptual definition and use related concepts interchangeably, but they do not directly refer to the intention to drop out (Muñoz-Inostroza et al., 2024). Similarly, this scale establishes a clear difference between the phenomenon of the intention to drop out and the intention to change majors. This feature also differs from some instruments that measure these two phenomena together (e.g., Cobo-Rendón et al., 2023; Ekornes, 2022; Galve-González et al., 2024; Schnettler et al., 2020) and allows for more precise measurement. Finally, the instrument comprises 15 items, divided into five dimensions that reflect the different phases of the dropout intention process. This feature also offers an advantage

over other methods of evaluating the phenomenon, which are limited to measuring it with a single item (for example, Bargmann et al., 2022; Bernardo et al., 2022a; Campos-Muñoz et al., 2024; Toyon, 2023; Yildirim et al., 2021).

CONCLUSIONS

The results and characteristics of the scale indicate that the evaluated instrument has appropriate external validity and reliability. In this regard, a moderate to strong correlation was observed between the five dimensions of the instrument and the scale previously validated in Mexico by Jacobo-Galicia et al. (2021), and a statistically significant inverse correlation was found between motivation, academic self-efficacy, and dropout intention. These results are consistent with the original study and with the existing literature on the subject. The characteristics of the instrument, such as its clear conceptual definition, the differentiation with respect to the intention to change careers, and the use of multiple items, also give it important advantages in measuring the construct studied.

However, this study has some limitations. First, it is a pilot study. The sample size is small. Furthermore, the sample was composed primarily of female students, which can bias the results and limit generalizability to other contexts. Second, some of the data were collected online, which represents limitations inherent to this type of survey.

Thus, in conclusion, this study contributes to advancing knowledge in the field of university dropout intention in Mexico, as the instruments validated in the country are limited not only in availability but also in their characteristics. This is relevant because validated instruments in the context allow higher education institutions to detect early signs of academic abandonment, thereby enabling the design of timely strategies to prevent or reduce school dropout. In this sense, the results of the study indicate that the Scale developed by Bäumle et al. (2022) shows preliminary external validity and adequate reliability for the study of the intention to drop out among university students in local settings. Thus, these results are valuable for guiding future research that considers larger and more diverse samples.

FUNDING

This research was conducted with funding support from the Secretariat of Sciences, Humanities, Technology and Innovation (SECIHTI) awarded as part of scholarship No. 852241 for postgraduate studies.

CONFLICT OF INTEREST

It is declared that there are no conflicts of interest regarding the submitted article between the authors, the journal, the publishing entity, and the funding entities.

AUTHORS' CONTRIBUTION

Aaron-Javier Euan-Catzin: Project management; Formal analysis; Conceptualization; Data curation; Writing - original draft; Writing - revision and editing; Research; Methodology; Resources; Software; Visualization.

Pedro-José Canto-Herrera: Writing - revision and editing; Methodology; Supervision; Validation; Visualization.

REFERENCIAS

- Aarkrog, V., Wahlgren, B., Larsen, C. H., Mariager-Anderson, D. K., & Gottlieb, S. (2018). Decision-making processes among potential dropouts in vocational education and training and adult learning. *International Journal for Research in Vocational Education and Training*, 5(2), 111–129. <https://doi.org/10.13152/IJRVET.5.2.2>
- Alves-Fior, C., Jorge-Polydoro, S., Soares-Pelissoni, A., Aparecida-Dantas, M., Martins, M. & Da-Silva, L. (2022). Impact of self-efficacy and academic performance in the dropout of higher education students. *Psicologia Escolar e Educacional*, 26, 1-11. <https://doi.org/10.1590/2175-35392022235218T>
- Achtziger, A., & Gollwitzer, P. M. (2018). Motivation and volition in the course of action. In J. Heckhausen, & H. Heckhausen (eds.). *Motivation and action* (pp. 485–527). Springer International Publishing. https://doi.org/10.1007/978-3-319-65094-4_12
- Ato-García, M., & Vallejo-Seco, G. (2015). *Diseños de investigación en psicología*. Ediciones Pirámide.
- Ato-García, M., López-García, J. J., & Benavente, A. (2013). Un sistema de clasificación de los diseños de investigación en psicología. *Anales de Psicología*, 29(3), 1038-1059. <https://doi.org/10.6018/analesps.29.3.178511>
- Baalmann, T. (2024). Health-related quality of life, success probability and students' dropout intentions: Evidence from a German longitudinal study. *Research in Higher Education*, 65, 153–180. <https://doi.org/10.1007/s11162-023-09738-7>
- Balta-Salvador, R., Olmedo-Torre, N. & Peña, M. (2022). Perceived discrimination and dropout intentions of underrepresented minority students in engineering degrees. *IEEE Transactions on Education*. 65(3), 267-276. <https://doi.org/10.1109/TE.2022.3158760>
- Bargmann, C., Thiele, L., & Kauffeld, S. (2022). Motivation matters: Predicting students' career decidedness and intention to drop out after the first year in higher education. *Higher Education*, 83(4), 845–861. <https://doi.org/10.1007/s10734-021-00707-6>
- Barrientos-Illanes, P., Pérez-Villalobos, M. V., Vergara-Morales, J. & Díaz-Mujica, A. (2021). Influence of the perceived autonomy support, self-efficacy, and academic satisfaction in the intentions of permanence of university students. *Revista Electrónica Educare*, 25(2), 90-103. <https://doi.org/10.15359/ree.25-2.5>
- Bäulke, L., Grunschel, C., & Dresel, M. (2022). Student dropout at university: A phase-orientated view on quitting studies and changing majors. *European Journal of Psychology of Education*, 37(3), 853–876. <https://doi.org/10.1007/s10212-021-00557-x>

- Bernardo, A. B., García-Gutiérrez, V., Esteban, M. & Maluenda-Albornoz, J. (2025). Relationship between self-efficacy and university dropout: A systematic review. *Frontiers in Psychology*, 26, 1-12. <https://doi.org/10.3389/fpsyg.2025.1553485>
- Bernardo, A. B., Galve-González, C., Cervero, A., & Tuero, E. (2022a). Cyberbullying in first-year university students and its influence on their intentions to drop out. *Higher Education Research & Development*, 42(2), 275–289. <https://doi.org/10.1080/07294360.2022.2057447>
- Bernardo, A. B., Galve-González, C., Núñez, J. C., & Almeida, L. S. (2022b). A path model of university dropout predictors: The role of satisfaction, the use of self-regulation learning strategies and students' engagement. *Sustainability*, 14(3). <https://doi.org/10.3390/su14031057>
- Blanco, H., Martínez, M., Zueck, M., & Gastélum, G. (2011). Análisis psicométrico de la escala de autoeficacia en conductas académicas en universitarios de primer ingreso. *Actualidades Investigativas en Educación*, 11(3), 1-27. <https://www.redalyc.org/pdf/447/44722178003.pdf>
- Bohdick, C. (2020). Predictors of dropout intentions in teacher education programmes compared with other study programmes. *Journal of Education for Teaching*, 46(2), 207–219. <https://doi.org/10.1080/02607476.2020.1724652>
- Bonilla-Jurado, D., Guevara, C., Ayala-Gavilanes, C., & Lliguisupa-Pastor, M. (2023). The school dropout: Causes and effects in university education. *Journal of Higher Education Theory and Practice*, 23(18). <https://doi.org/10.33423/jhetp.v23i18.6629>
- Buizza, C., Cela, H., Sbravati, G., Bornatici, S., Rainieri, G. & Ghilardi, A. (2024). The role of self-efficacy, motivation, and connectedness in dropout intention in a sample of Italian college students. *Education. Science*, 14(1), 67. <https://doi.org/10.3390/educsci14010067>
- Campos-Muñoz, E., Blanco, E., & Bernardo, A. B. (2024). Salud mental e intención de abandono universitario: el papel moderador de la adaptación. *Revista de Estudios e Investigación en Psicología y Educación*, 11(2), 1-15. <https://doi.org/10.17979/reipe.2024.11.2.11109>
- Creswell, J. W. (2012). *Educational research: Planning, conducting, and evaluating quantitative and qualitative Research* (4th ed.). Pearson.
- Cobo-Rendón, R., Hojman, V., García-Álvarez, D., Cobo-Rendón, R. (2023). Academic emotions, college adjustment, and dropout intention in university students. *Frontiers in Education*, 8. <https://doi.org/10.3389/educ.2023.1303765>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.
- Díaz-Mujica, A., Pérez-Villalobos, M. V., Bernardo, A. B., Cervero-Fernández-Castañón, A., & González-Pienda, J. A. (2019). Variables afectivas y cognitivas implicadas en la predicción estructural del abandono universitario. *Psicothema*, 31(4), 429-436. <https://doi.org/10.7334/psicothema2019.124>
- Ekornes, S. (2022). The impact of perceived psychosocial environment and academic emotions on higher education students' intentions to drop out. *Higher Education Research and Development*, 41(4), 1044–1059. <https://doi.org/10.1080/07294360.2021.1882404>
- Findeisen, S., Brodsky, A., Michaelis, C., Schimmelpenninck, B., & Seifried, J. (2024). Dropout intention: A valid predictor of actual dropout? *Empirical Research in Vocational Education and Training*, 16(1). <https://doi.org/10.1186/s40461-024-00165-1>

- Gaeta, M. L., Cavazos, J., Sánchez, A. P., Rosario, P., & Högemann, J. (2015). Propiedades psicométricas de la versión mexicana del Cuestionario para la Evaluación de Metas Académicas (CEMA). *Revista Latinoamericana de Psicología*, 47(1), 16–24. [https://doi.org/10.1016/S0120-0534\(15\)30002-9](https://doi.org/10.1016/S0120-0534(15)30002-9)
- Galve-González, C., Bernardo, A. B., & Castro-López, A. (2024). Understanding the dynamics of college transitions between courses: Uncertainty associated with the decision to drop out studies among first and second year students. *European Journal of Psychology of Education*, 39(2), 959–978. <https://doi.org/10.1007/s10212-023-00732-2>
- Girelli, L., Alivernini, F., Lucidi, F., Cozzolino, M., Savarese, G., Sibilio, M. & Salvatore, S. (2018). Autonomy supportive contexts, autonomous motivation, and self-efficacy predict academic adjustment of first-year university students. *Frontiers in Education*, 3(95). <https://doi.org/10.3389/educ.2018.00095>
- Jacobo-Galicia, G., Máñez-Guaderrama, A. I., & Cavazos-Arroyo, J. (2021). Miedo al Covid, agotamiento y cinismo: su efecto en la intención de abandono universitario. *European Journal of Education and Psychology*, 14(1). <https://doi.org/10.32457/ejep.v14i1.1432>
- Ko, K., Bartoszek, K., Peek, S. A., & Hurley, M. (2023). Profiles of first-generation college students: social, financial, academic, and cultural barriers to college lives. *Journal of College Student Retention: Research, Theory & Practice*, 27(2). <https://doi.org/10.1177/15210251231188508>
- Krötz, M., & Deutscher, V. (2021). Differences in perception matter – how differences in the perception of training quality of trainees and trainers affect drop-out in VET. *Vocations and Learning*, 14(3), 369–409. <https://doi.org/10.1007/s12186-021-09263-7>
- López-Angulo, Y., Cobo-Rendón, R. C., Pérez-Villalobos, M. V., & Díaz-Mujica, A. E. (2021). Social support, autonomy, academic commitment, and drop out intention in first year undergraduate students. *Formacion Universitaria*, 14(3), 139–148. <https://doi.org/10.4067/S0718-50062021000300139>
- Miño, M. E. (2021). Factores condicionantes de la deserción universitaria. *Ciencia Latina Revista Multidisciplinar*, 5(4), 5316–5328. https://doi.org/10.37811/cl_rcm.v5i4.691
- Morelli, M., Chirumbolo, A., Baiocco, R. & Cattellino, E. (2023). Self-regulated learning self-efficacy, motivation, and intention to drop-out: The moderating role of friendships at University. *Current Psychology*, 42, 15589–15599. <https://doi.org/10.1007/s12144-022-02834-4>
- Muñoz-Inostroza, K., López-Angulo, Y., Sáez-Delgado, F., Pinto-Vigueras, J., Melo-Moreno, P., & Bernardo, A. B. (2024). Measuring dropout intention in college students: A systematic literature review. *Journal of Higher Education Theory and Practice*, 24(6), 2024. <https://doi.org/10.33423/jhetp.v24i6.7019>
- OECD. (2010). *Education at a Glance 2010: OECD Indicators*. OECD Publishing. https://doi.org/10.1787/eag_highlights-2010-en
- OECD. (2024). *Education at a Glance 2024 OECD Indicators*. OECD Publishing. <https://doi.org/10.1787/c00cad36-en>
- Passeggia, R., Testa, I., Esposito, G., De-Luca-Picone, R., Ragozini, G., & Freda, M. F. (2023). Examining the relation between first-year university students' intention to drop-out and academic engagement: The role of motivation, subjective well-being and retrospective judgements of school experience. *Innovative Higher Education*, 48, 837–859. <https://doi.org/10.1007/s10755-023-09674-5>

- Peinado, J. E., Chávez, A., Viciano, J., & Rivero, J. G. (2012). Invarianza Factorial del Cuestionario de Autoeficacia EACA en Universitarios de Ciencias de la Salud y Ciencias Sociales. *Formación Universitaria*, 5(4), 37-47. <https://doi.org/10.4067/S0718-50062012000400005>
- Poveda-Aguja, F. A., Barbosa-Guerrero, L. M., & Ríos-Rincón, M. P. (2023). University dropout problems and educational trends. *Journal of Advanced Zoology*, 44(s5), 1671–1678. <https://doi.org/10.17762/jaz.v44iS-5.1418>
- Robbins, S. B., Lauver, K., Le, H., Davis, D., Langley, R., & Carlstrom, A. (2004). Do psychosocial and study skill factors predict college outcomes? A meta-analysis. *Psychologica Bulletin*, 130(2), 261-288. <https://doi.org/10.1037/0033-2909.130.2.261>
- Rump, M., Esdar, W., & Wild, E. (2017). Individual differences in the effects of academic motivation on higher education students' intention to drop out. *European Journal of Higher Education*, 7(4), 341–355. <https://doi.org/10.1080/21568235.2017.1357481>
- Sáez, F., López, Y., Cobo, R., & Mella, J. (2020). Revisión sistemática sobre intención de abandono en educación superior. En *IX Congreso CLABES (2019)* (pp. 91–100). Panamá: Universidad Tecnológica de Panamá. <https://revistas.utp.ac.pa/index.php/clabes/article/view/2628>
- Satico-Ferraz, A., Angeli, A. A., Ambiel, R. & Portela, S. (2021). Reasons for droppingout and learning motivation in higher education. *Estudos de Psicologia*, 26(3), 229-241. https://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1413-294X2021000300001
- Schnettler, T., Bobe, J., Scheunemann, A., Fries, S., & Grunschel, C. (2020). Is it still worth it? Applying expectancy-value theory to investigate the intraindividual motivational process of forming intentions to drop out from university. *Motivation and Emotion*, 44(4), 491–507. <https://doi.org/10.1007/s11031-020-09822-w>
- Sosu, E. M., & Pheunpha, P. (2019). Trajectory of university dropout: Investigating the cumulative effect of academic vulnerability and proximity to family support. *Frontiers in Education*, 4. <https://doi.org/10.3389/educ.2019.00006>
- Toyon, M. A. S. (2023). Student employees' dropout intentions: Work excuse and university social capital as source and solution. *European Journal of Educational Research*, 12(3), 1329–1348. <https://doi.org/10.12973/eu-jer.12.3.1329>
- Véliz-Palomino, J. C., & Ortega, A. M. (2023). Dropout intentions in higher education: Systematic literature review. *Journal on Efficiency and Responsibility in Education and Science*, 16(2), 149–158. <https://doi.org/10.7160/eriesj.2023.160206>
- Yildirim, H. H., Zimmermann, J., & Jonkmann, K. (2021). The importance of a sense of university belonging for the psychological and academic adaptation of international students in Germany. *Zeitschrift Fur Entwicklungspsychologie Und Padagogische Psychologie*, 53(1–2), 15–26. <https://doi.org/10.1026/0049-8637/a000234>