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Self-Efficacy and Creativity Barriers Affecting the Entrepreneurial Intention of University Students

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Abstract

Entrepreneurship has gained global relevance due to its impact on economic and social development. This study focuses on the factors that influence the entrepreneurial intention of university students, specifically self-efficacy and creativity barriers, considering the context of higher education at the Technological Institute of Sonora (ITSON). A quantitative approach was used with a sample of 868 students, who answered an instrument designed to measure key variables. The data were analyzed using descriptive statistics and a structural equation model (PLS-SEM) to validate the hypotheses raised. The results demonstrate that self-efficacy is a crucial factor in fostering entrepreneurial intention, reflecting its ability to motivate and strengthen students' confidence in their entrepreneurial abilities. On the other hand, creativity barriers, both internal and external, have a significant negative impact on intentions. Among the barriers highlighted are lack of confidence, fear of failure, and lack of specific skills, which limits students' ability to develop entrepreneurial projects. Highlighting the importance of promoting educational strategies that strengthen self-efficacy and reduce creative barriers in university students. Fostering an entrepreneurial culture within education can not only increase entrepreneurial intention, but also contribute to the development of innovative projects that boost the economy and generate significant social benefits.

Keywords: self-efficacy, creativity barriers, higher education, entrepreneurial intention, PLS

1. Introduction

Entrepreneurship has established itself as a crucial element for the economic, social and cultural development of nations (Lv, 2021), particularly in university contexts that encourage the generation of new ideas and innovative projects (Chowdhury, 2018). Self-efficacy and the loopholes for creativity are key factors in understanding students' entrepreneurial intentions (Li, 2023). Self-efficacy refers to the belief in one's ability to perform specific tasks, while barriers to creativity can be internal or external, limiting innovative ability and project implementation (Bandura, 1997). Determining not only the potential success of an entrepreneur, but also conditioning how students face the challenges of the labor market (Chen, 1998; Luo, 2022). Self-efficacy is critical for motivation and performance (Bandura, 1977), and has been significantly linked to academic performance and entrepreneurial intent (Honicke & Broadbent, 2016). Acting as a predictor of success in activities related to business creation (Deliana, 2023). In turn, creativity is a valuable skill that affects problem-solving and innovation (Anderson, 2014), although factors such as lack of trust and limited access to resources are significant obstacles to developing them (Namyślak, 2020). From the perspective of psychology through: McClellan's Theory (McClelland, 1961), Expectation Theory/Valuation (Vroom, 1964), Theory of Planned Behavior (Ajzen, 1991), Social Cognitive Theory (Bandura, 1986) and business perspective through the Theory of Efficiency-X (Leibenstein, 1966), have explored the individual dimensions of creativity with factors related to openness to new experiences that influence creative capacity (Platschorre, 2016).

In Latin America, university entrepreneurship is an important strategy to combat youth unemployment and promote economic development (Inter American DevelopmentBank, 2022). The region shows high early entrepreneurial activity (TEA), but faces challenges in financing, public policies and business education (GEM, 2020). Highlighting the need to explore how self-efficacy and barriers to creativity affect entrepreneurial intentions in college students (Awotunde & Westhuizen, 2021). In Mexico, in particular, it faces challenges in

business education (Pérez-Hernández, 2021), access to financing (Villegas Mateos & Amorós, 2019) and technology transfer (González & Angulo, 2020), limiting youth entrepreneurship (Ramírez-Urquidy, 2024). Despite the advances in promoting entrepreneurship in universities, obstacles persist that hinder the development of projects among students (Melchor-Durán, 2024). Lack of self-efficacy (Yodchai, 2022) and barriers to creativity (Kier & McMullen, 2020), are limitations that have a negative impact on labor insertion and economic growth in the region (Khanin, 2022). Research indicates that a lack of self-efficacy and creative barriers, such as fear of failure and scarcity of resources, are determinants that inhibit entrepreneurial intention (Al Halbusi, 2024). This problem is compounded in various regions of Mexico, where entrepreneurship opportunities are conditioned by an unfavorable economic and cultural context (Review & Sciences, 2016). Based on the above, the following research questions have been raised: 1. Is self-efficacy or can it be a means to increase entrepreneurial intention for ITSON university students? and 2. What are the main barriers that limit creativity for the development of entrepreneurial intention in ITSON university students? The general objective is to analyze the impact of self-efficacy and barriers to creativity on the entrepreneurial intentions of ITSON university students. In addition, the following specific objectives are deduced: 1. To verify the effect of self-efficacy on the results of the entrepreneurial intentions of ITSON university students and 2. To verify the influence that creativity barriers have on the entrepreneurial intentions of ITSON university students.

2. Literature Review and Hypothesis Development

The study of the factors that influence the entrepreneurial intention of university students is increasingly important, especially in contexts where entrepreneurship is seen as a value for economic and social development (Bazán, 2020; Su, 2021). Self-efficacy, which refers to a person's beliefs about their ability to achieve goals (Bandura, 1977), influences individual motivation and performance (Teng, 2021). Creativity can be affected by internal and external factors for the generation of new and useful ideas (Amabile, 1996). Barriers to creativity are those elements that limit this ability, such as lack of confidence, skills, or resources (Børte, 2023). Entrepreneurial intention is based on a person's desire to plan the creation of a business or project, and is influenced by psychological, social, and contextual factors (Gulzar & Fayaz, 2023). Self-efficacy theory proposes that beliefs about one's own ability affect people's thoughts, emotions, and actions (Bandura, 1986). These beliefs are formed from four sources: experiences of success, observations of others, verbal influence, and emotional states (Bandura, 1997). In education, students can improve their self-efficacy through hands-on activities, mentoring, and positive feedback (Adams, 2020), which increases their confidence to face challenges and obstacles when starting a business (Meng & Jia, 2023). Previous research indicates that self-efficacy positively influences the intention to start a business, enhancing youth motivation and resilience (Chien-Chi, 2020). Creativity is crucial for entrepreneurial development, allowing people to generate innovative ideas and solve problems (Entrialgo & Iglesias, 2020). However, there are internal barriers, such as lack of confidence and fear of failure (Thanh, 2020), as well as external barriers, such as the social and economic environment, that limit the capacity for innovation (Castillo-Vergara, 2021; Lubart, 1998). These restrictions affect students' ability to develop their entrepreneurial ideas and can hinder their intention to become entrepreneurs (Motwani, 2024). The Theory of Planned Behavior, providing a comprehensive framework for understanding entrepreneurial behavior (Ajzen, 1991). Arguing that the intention to perform a specific behavior, such as entrepreneurship, is influenced by three main factors: attitudes toward the behavior (Aliedan, 2022), subjective norms (Al-Jubari et al., 2019) and perceived control (Lihua, 2022). Identifying that entrepreneurial intent is a significant driver of entrepreneur behavior, and that factors such as self-efficacy and creative barriers influence their development (Al-Jubari et al., 2019). According to the information from the previous context, the following hypothetical approaches have been developed:

H1: The greater the self-efficacy of ITSON university students, the greater the entrepreneurial intention.

H2: The greater the barriers to creativity, the greater the entrepreneurial intention of ITSON university students.

H3: The greater the internal barriers to creativity, there is a decrease in the entrepreneurial self-efficacy of ITSON university students.

The hypotheses developed in the research have generated the following theoretical operative model:

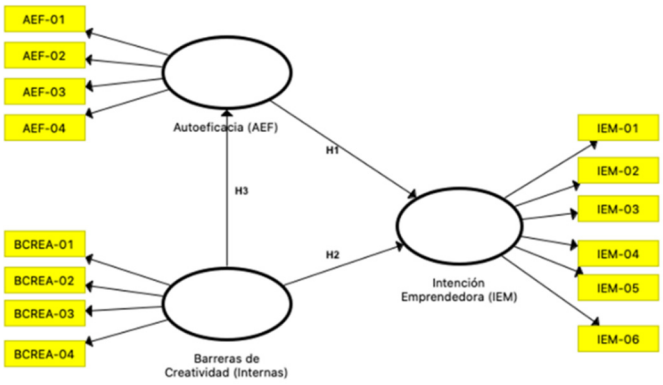

Figure 1. Research operating model

3. Method

The present study is a causal research with a quantitative approach, based on the collection of data to validate hypotheses through numerical measurement and statistical analysis, seeking to establish patterns of behavior and test theories (Hair, 2017). Data collection was carried out through an online survey using Google Forms. The questions were structured on a Likert-type scale, which measures the answers in five levels and/or points as shown below: (1) Strongly disagree, (2) disagree, (3) neither agree nor disagree, (4) agree and finally (5) Strongly agree, seeking to be able to analyze the data obtained and thus test the hypotheses through a statistical analysis that facilitates a more precise measurement of the variables of the research model: 1) Self-efficacy, 2) Internal barriers to creativity and 3) Entrepreneurial intentions. The research instrument was aimed at students of ITSON Campus Guaymas and Obregón (Campus Centro and Nainari), during the period of February – June 2019. This study is based on a sample of 891 ITSON students. To ensure the sample size, an adequate formula was applied for populations of less than 500 thousand subjects. A finite sample was used which is based on a simple random probabilistic process, ensuring that all participants had the same probability of being selected. The average population under study corresponds to 18,000 ITSON students who are studying different educational programs at the Guaymas, Centro and Nainari Campuses of Ciudad Obregón Sonora, according to information provided by the academic direction of the University (ITSON, 2022). Based on the results of the formula for determining the sample size, it was concluded that the minimum number of students to be surveyed should be at least 891 (Table 1). The confidence level used to determine the sample was 95% and a margin of error of 3.2%, a probability for and against of 50%.

Table 1. Sample determination

Data		**Conversion**
N	18,000	Elements of the population
P	50%	0.50
Q	50%	0.50
Δ	95%	1.96
And	3.2%	0.03
n	891	Sample Items

Sources. Authors. This table describes the procedure used to determine the research sample, through the following values: N = Total Universe or Population, p and q: It is the probability for and against, δ = the degree of reliability, e = refers to the estimation error, and n = is the total of the sample.

Stratification helps the accuracy of the sample and involves the use of different sample sizes for each stratum or segment, seeking to reduce the variance of the sample mean (Kalton & Heeringa, 2003). Kish (1995) and Argibay (2009) have confirmed that in a specific set of sample elements n = Σ nh, the variance of the sample mean can be minimized if the sample size for each stratum is proportional to the standard deviation within that stratum. To calculate the sample factor corresponding to segment and/or stratum, it is necessary to divide: the sample by the population by stratum, and then multiply it by the factor obtained. The formula is: ksh = nh/Nb, ksh = 891/18,000 = 0.0495. Table 2 shows the subjects required for each stratum.

Table 2. Sample by strata or segments

Area/Discipline	Frequency	Percentage	Sample Required
Environmental Sciences and Health	2,538	14.1	125.40
Engineering Sciences	6,390	35.5	316.30
Economic and Administrative Sciences	6,390	35.5	316.30
Social Sciences (Humanities)	2,700	15.00	133.00
Total	18,000	100	891.00

Table 3 shows the total and percentage of the sample that participates in the study according to the different strata (academic directions), health sciences, engineering, economic-administrative and social. The sample presenting 97.5% of the required sample according to the formula. However, there were strata where the required sample could not be obtained. Some of the limitations and/or barriers that arose during the application of the survey are mainly due to: lack of interest from the respondents; lack of respondents' time; difficult access to obtain information by the team in charge of the project (social, cultural and/or technological aspects); and little motivation of the respondents when answering. Despite these mishaps, the sample obtained is considered reliable and representative to make judgments and/or make inferences about the phenomenon under study.

Table 3. Sample Feature by area or discipline

Area/Discipline	Frequency	Percentage	% of sample achieved
Environmental Sciences and Health	122	14.1	96%
Engineering Sciences	308	35.5	102 %
Economic and Administrative Sciences	308	35.5	105%
Social Sciences (Humanities)	130	15.0	97%
Total	868	100	

Source. This table shows the frequency and percentage achieved from the sample based on the areas that were surveyed within the university.

The population of this study is classified as follows, according to the number of students at the ITSON Guaymas and Obregón Campus (Centro and Nainari) in 2019. The total population for this study amounts to 18,000 students between 18 and 26 years old, organized by academic area or university discipline. Which includes: Environmental Sciences and Health (4 educational programs), Engineering Sciences (4 educational programs), Economic and Administrative Sciences (4 educational programs) and Social Sciences (Humanities) (2 educational programs). Table 4 presents the ages of the participants in this study.

Table 4. Age of the students surveyed

Age	Frequency	Percentage	Valid percentage	Cumulative percentage
18	62	7.1	7.1	7.1
19	379	43.7	43.7	50.8
20	165	19	19	69.8
23	70	8.1	8.1	77.9
25	25	2.9	2.9	80.8
26	167	19.2	19.2	100
Total	868	100	100	

Source. Authors, extracted from data collected.

For the validation of the instrument, a factor analysis was carried out together with a Harman single-factor test

(Common Method of Variance (CMV)), performing the following steps: (1) perform a factor analysis of all latent and endogenous exogenous constructs of the model, followed by an analysis of the principal components without applying any type of rotation method; and (2) the values of the non-rotated components and the number of factors contributing to the variance were analyzed (Reio, 2010). The results of this test indicated that: the model was grouped into 3 factors, the Kaiser-Meyer-Olkin indicator (KMO) reached a value of 0.850 and significant at 99%, and the total variance explained was 67.53%. In addition, the explained variance of the first factor (26.61%) was lower than the total explained variance, thus ruling out the presence of response bias (Table 5).

Table 5. Kaiser-Mayer-Olkin Test

KMO and Bartlett test (Kaiser-Meyer-Olkin sampling suitability)	**KMO**	**0.850**
Bartlett sphericity test Approx. Chi-square	2	3816.171
	Degrees of freedom (gl)	66
	Significance	0.000

Source. Extracted from data collected. Significance (0.000 = 99%)

Regarding the identification of the explained variance s2. It is one of the most important statistical concepts, given that most quantitative tests are based on it. Analysis of variance is not limited to a single procedure; there are several models of analysis of variance (Ramos, 2012). See Table 6.

Table 6. Total variance explained

Total variance explained									
Factor	Initial eigenvalues			Load Extraction Sums Squared					
	Total	% variance	Cumulative %	Total	% variance	Cumulative %	Total	% variance	Cumulative %
1	4.363	36.358	36.358	4.363	36.358	36.358	3.194	26.619	26.619
2	2.198	18.313	54.671	2.198	18.313	54.671	2.639	21.992	48.611
3	1.543	12.862	67.534	1.543	12.862	67.534	2.271	18.923	67.534
4	0.656	5.465	72.999						
5	0.643	5.355	78.354						
6	0.58	4.834	83.188						
7	0.5	4.17	87.358						
8	0.429	3.577	90.935						
9	0.388	3.232	94.166						
10	0.343	2.855	97.022						
11	0.2	1.664	98.685						
12	0.158	1.315	100						

Source. Extracted from data collected. Extraction method: principal component analysis.

3.1 Measurement of Variables

Efficacy. This variable was measured conceptually and statistically as a first-order construct and as a reflective-type variable in mode A. To elaborate the measurement scales, studies of Bandura (1977) who proposes a theory on the change of human behavior. In addition, research on Stajkovic (2018)) and Kolo (2017), on the relationship between self-efficacy and academic performance of students. Initially, it was evaluated with 17 questions, but after reliability and validity tests, it was reduced to 4 questions. The measurement was carried out with a 5-point Likert scale, with 1=Total disagreement and 5=Strongly agree (Table 7).

Table 7. Internal consistency and convergent validity by construct (First-order reflective variable)

Construct	CF	FC	AC	Rho_A
Self-efficacy (AEF)		0.899	0.850	0.853
AEF-01	0.843***			
AEF-02	0.856***			
AEF-03	0.829***			
AEF-04	0.795***			

Source. Authors. This table shows: CF = Factor load, FC = Composite reliability, AC = Cronbach's alpha, in addition to showing the levels of significance according to the values of: *, **, ***, at 10%, 5% and 1% respectively.

Internal barriers to creativity. This variable was measured conceptually and statistically as a first-order construct and as a mode A reflective variable. Scales of measures were developed based on the studies of Amabile and Pratt (2016), who present a model of creativity and innovation that includes four constructs: The perception of progress in the development of creative ideas; The relevance of the work for those who perform it; Affect and Extrinsic Motivation. Guilera (2011) He classified internal and external barriers, defining internal barriers as obstacles that cause insecurity to the individual, while external barriers are related to factors of the cultural, environmental, productive and economic environment. Initially, 16 questions were used to measure this variable, but after reliability and validity tests, it was reduced to 4 questions in the field of internal barriers, since they did not meet the parameters pre-established by the experts. Using a 5-point Likert scale, with 1=Total disagreement and 5=Strongly agree (Table 8).

Table 8. Internal consistency and convergent validity by construct (First-order reflective variable)

Construct	CF	FC	AC	Rho_A
Internal Barriers to Creativity (BRCREA)		0.834	0.741	0.790
BECREA-01	0.655***			
BECREA-02	0.669***			
BECREA-03	0.846***			
BECREA-04	0.805***			

Source. This table shows: CF = Factor load, FC = Composite reliability, AC = Cronbach's alpha, in addition to showing the levels of significance according to the values of: *, **, ***, at 10%, 5% and 1% respectively.

Entrepreneurial intentions. This variable was measured conceptually and statistically as a first-order construct and as a mode A reflective variable. To develop the measurement scales for this construct, the studies developed by the GEM (2020) where the role of entrepreneurship, the processes of business creation and conceptual business development are analyzed, on the other hand Álvarez & Urbano (2011) They analyze that entrepreneurial intention depends on personal and social factors that an entrepreneur must consider to meet the objective of innovating and/or improving a project or organization. This variable was measured with 6 questions originally, which went through reliability and validity tests, maintaining the 6 questions. This variable was measured using a 5-point Likert scale, with 1=Total disagreement and 5=Strongly agree (Table 9).

Table 9. Internal consistency and convergent validity by construct (First-order reflective variable)

Construct	CF	FC	AC	Rho_A
Entrepreneurial Intentions (IEM)		0.926	0.902	0.902
IEM-01	0.638***			
IEM-02	0.827***			
IEM-03	0.898***			
IEM-04	0.871***			
IEM-05	0.891***			
IEM-06	0.790***			

Source. This table shows: CF = Factor load, FC = Composite reliability, AC = Cronbach's alpha, in addition to showing the levels of significance according to the values of: *, **, ***, at 10%, 5% and 1% respectively.

4. Results

To evaluate the measurement model with reflective variables in mode A (Self-efficacy, Creativity barriers and entrepreneurial intentions), analyzing the factor load, compound reliability, internal consistency of the scale and convergent validity. It is established that a standardized load of the factor must be greater than 0.707, to guarantee the individual reliability of each item (Carmines & Zeller, 1979; Roberts & Priest, 2006; Chin & Dibbern, 2010). The factor loads obtained vary between 0.638 and 0.898, very close to and above 0.707. The composite reliability ranges from 0.834 to 0.926, exceeding the minimum value of 0.800 suggested by Nunnally (1978) and Vandenberg & Lance (2000). Cronbach's Alpha is satisfactory with values above 0.700 (Hair, 2010). Yielding results of the model of 0.741, 0.850 and 0.902 (Table 12). The mean variance extracted (AVE) is between 0.560 and 0.690. Being above the established minimum of 0.500 per cent. (Hair, 2017). Finally, the discriminant validity of the model constructs was confirmed by the analysis of the square ratio of the AVE. Using tests for the analysis under the proposed criteria of Henseler (2015), ensuring the coherence of the model (Table 13).

Table 12. Validity and internal consistency of constructs

Variables	Alpha of Cronbach	Reliability composite (rho_a)	Reliability composite (rho_c)	Variance Extracted Medium (AVE)
Self-efficacy (AEF)	0.850	0.853	0.899	0.690
Internal Barriers to Creativity (BECREA)	0.741	0.741	0.834	0.560
Entrepreneurial Intentions (IEM)	0.902	0.902	0.926	0.679

Table 13. Discriminant validity of the model

Variables	AEF	BECREA	IEM
Self-efficacy (AEF)	0.831		
Internal Barriers to Creativity (BECREA)	-0.101	0.748	
Entrepreneurial Intentions (IEM)	0.506	-0.158	0.824

Additionally, a discriminant validity analysis was carried out showing that all the values of the constructs manifest a result below 1 (Franke & Sarstedt, 2019), according to the HTMT test with the classical criteria that measure discriminant validity (Henseler, 2015). These tests do not detect any abnormalities. Therefore, it is conclusively inferred that these results provide adequate validity and reliability of the constructs under study (convergent and discriminant) (Table 14).

Table 14. Discriminant validity of the theoretical model Heterotrait-Monotait Ratio (HTMT)

Variables	Original Sample (O)	Sample mean (M)	5.0%	95.0%
BECREA (INTERNAL) -> AEF	0.119	0.131	0.070	0.206
IEM -> AEF	0.577	0.577	0.516	0.635
IEM -> BECREA (INTERNAL)	0.188	0.189	0.108	0.271

The matrix analysis of correlations of the constructs measures the degree of the linear relationship between each pair of variables (Table 15). The matrices that describe these mappings are called correlation matrices, which describe the correlation properties associated with linear input and output combinations. In addition, they provide a useful tool for theoretical derivations and demonstrations (Daemen & Rijmen, 2020).

Table 15. Matrix of construct correlations

Variables	Original Sample (O)	Sample mean (M)	Standard Deviation (STDEV)	Statistics t (|O/STDEV|)	P Values
BECREA (INTERNAL) -> AEF	-0.101	-0.107	0.041	2.495	0.006
IEM -> AEF	+0.506	+0.508	0.033	15.486	0.000
IEM -> BECREA (INTERNAL)	-0.158	-0.163	0.040	3.952	0.000

Structural model. The statistical technique of structural equations based on variance, PLS-SEM, is used to verify hypotheses through the multivariate technique. Given the nature of this predictive and confirmatory research, the use of PLS-SEM becomes the most appropriate for its development and analysis (Henseler, 2016). For this analysis of the structural model (hyothesis test), the results of the β coefficient, the degree of significance (p value), the standard deviation (SD) and the distribution of the values are shown using Student's t-test. To test the operating model hypotheses, the bootstrapping procedure was used with 5,000 subsamples as recommended Chin (1998).

Table 16. Result of the model hypotheses

	Beta	Standard deviation	Statistics t	F^2	P values
H1: AEF -> IEM	+0.495***	0.033	15.168	0.332	0.000
H2: BECREA (INTERNAL) -> IEM	-0.108***	0.036	2.965	0.016	0.002
H3: BECREA (INTERNAL) -> AEF	-0.101***	0.036	2.965	0.010	0.002

Notes. n = 5000 subsamples: *** $p < 0.001$, ** $p < 0.01$ (t student 1 tail), t (0.05; 4999) = 1645; t(0.01; 4999) = 2327; t (0.001; 4999) = 3092. Ns = non-significant.

Table 16 and Figure 2 show the results of the estimation with PLS-SEM. According to the bootstrapping analysis to test the hypotheses, it indicates that all the hypotheses structured in the model show empirical support, that is, that they have all been confirmed. The results report a significant and positive effect on H1 (Beta: 0.495***). However, H2 (Beta: -0.108***) and H3 (-0.101***) have a significant but negative influence (Figure 2).

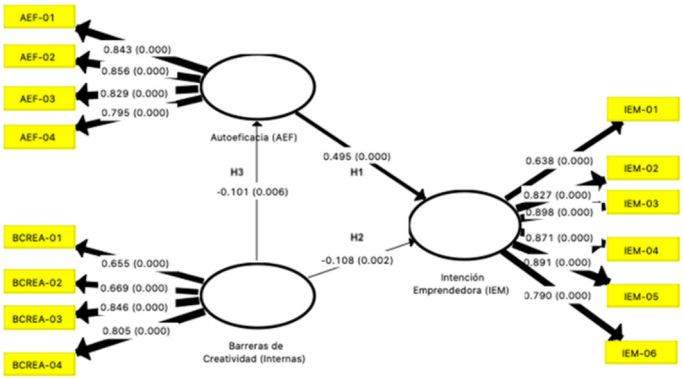

Figure 2. Theoretical model with measurements

To evaluate the fit of the proposed model with the SEM techniques based on variance, in PLS they are not yet fully developed and it is only possible to estimate as a function and based on: The value of the trajectory coefficients, the analysis of (R^2) and the values of (F^2) being significant individual measurements to explain the predictive capacity of the structural model (Chin & Dibbern, 2010b; Müller, 2018). Path coefficients around 0.2 are considered significant (Ghobakhloo, 2011). The coefficients of the model of this research are -0.101***,

-0.108***, 0.495***. The results of the model through R^2 are taking into account the values of 0.1, 0.25 and 0.36 (small, medium and large effects) (Wetzels, 2009). Obtaining a result for self-efficacy of 0.09 (small effect) and for entrepreneurial intention of 0.27 (medium effect).

The value (F^2) is used to measure and provides the size of the effect in a model. F^2, 0.02, 0.15, and 0.35 values indicate weak, medium, or large effect (Leal-Rodríguez, 2014). The F^2 analysis shows results of 0.332 (large effect), 0.016 (weak effect) and 0.010 (weak effect), evidencing that the strongest relationship is between self-efficacy and learning intentions. This shows that the model has good structural property and an adequate explanatory level. The Q^2 (cross-validated redundancy index) statistic test is used to evaluate the predictive relevance of constructs in a model with reflective variables. It was evaluated with the Blindfolding technique (Huit, 2018), giving values of 0.006 for self-efficacy and 0.175 for entrepreneurial intention, showing good preductive quality since it is a value greater than zero (Hair, 2010) (Tables 17 and 18).

Table 17. Predictive Quality and Model Tuning (R^2)

	R squared	**R squared adjusted**
Self-efficacy (AEF)	0.010	0.009
	0.268	0.266

Fountain. Own elaboration

Table 18. Predictive Quality and Model Tuning (Q^2)

	SSO	**SSE**	**Q^2 (=1-SSE/SSO)**
Self-efficacy (AEF)	2932.000	2914.253	0.006
Creativity Barriers (Internal)	2932.000	2932.000	
Entrepreneurial Intent (IEM)	4398.000	3626.458	0.175

Complementing the range of metrics to assess the predictive relevance of a theoretical model, it is important to reference researchers as Hair (2017) who have advocated for several PLS-based goodness-of-fit indices, such as the standardized residual mean square root (SRMR) or the residual covariance mean square root. However, there are doubts about whether the fit measured in a factor-based SEM context is relevant to PLS (Hair, 2017). It is recommended that the SRMR be > 0.08 (Hair, 2019). Our result was 0.059 (Table 19). Normalized Adjustment Index (NFI) values close to 0.9 are recommended; Our result was 0.896. The RMStheta is <0.16 (Hu & Bentler, 1999); Our result was 0.168. This indicates that the proposed theoretical model has an acceptable quality, predictive relevance and fits the theory.

Table 19. Model fit indicators

	Saturated Model	**Estimated model**
Damn	0.059	0.059
D_ULS	0.369	0.369
D_G	0.125	0.125
Chi-square	541.054	541.054
NFI	0.896	0.896
Rms Theta		0.168

5. Discussion and Conclusions

In this section, research results based on psychological and business theories are discussed. In the foreground, the effects of self-efficacy on ITSON university students and their entrepreneurial intentions are discussed (H1). Entrepreneurial self-efficacy is a skill that helps people organize and carry out actions to achieve goals (Kirk, 2013). Knowing the intention to start a business is important to find support that facilitates entrepreneurship (Gelaidan & Abdullateef, 2017). In addition, entrepreneurship and education must motivate students to overcome

risks that seem impossible (Boldureanu, 2020). This relates to the model of planned behavior of Ajzen (1991), which mentions factors such as attitude, subjective norms, and control as determinants of intent. The results of the H1 indicate a positive and significant relationship between self-efficacy and entrepreneurial intentions. It is proven that students with a high level of self-efficacy have greater entrepreneurial intentions. If students feel more capable, they develop more entrepreneurial intentions through actions such as: Estimating the demand for a new product or service, determining a competitive price, and estimating the funds needed to start a business. On the other hand, there are actions with entrepreneurial intentions such as: Wanting to be an entrepreneur, creating a company, thinking about entrepreneurship, and the intention to start a company. The intention to start a business is crucial for the success of entrepreneurs (Mabhena & Ncube, 2024). It is presented as a positive attitude that encourages the creation of new companies, through the development of skills during a person's training. (Ojubanire & Adegboyega, 2020). To make effective entrepreneurial decisions, it is essential to advance knowledge related to entrepreneurship (From Winnaar & Scholtz, 2020). In this sense, entrepreneurship is related to self-efficacy (Gielnik, 2020). Training in entrepreneurial intention is essential to enhance the characteristics of the entrepreneur and offer young people the necessary tools to start a new business (Di Giusto Valle, 2024). A study developed by Varela-chilchoa & Cholula (2020), indicates that universities seek to adjust curricula to include theories and skills on entrepreneurship and thus motivate students.

One of the most influential concepts in entrepreneurial intent is creativity (Altinay, 2022). It is essential to know the barriers or limitations that may arise during the creative process, both internal and external, related to the environment. Seeking to identify creativity barriers in entrepreneurial intention, where it is observed that these barriers negatively affect entrepreneurship, especially internal ones. These aspects relate to the theory of planned behavior, which is based on a person's intention to perform an action depending on the availability of opportunities and resources (time, funding, skill, and cooperation of other people) (Ajzen, 2011). As well as external ones, related to academic, social and cultural factors (Morais et al., 2014), such as rigid curricular structures, restricting experimentation and critical thinking (Sternberg, 2006), lack of institutional support (lack of laboratories and technological tools or specialized mentors) (Heinze et al., 2009), social pressure and family expectations, encouraged to follow traditional paths (Agars et al., 2008), unfavorable organizational climate within universities due to the lack of collaboration between students (Hunter et al., 2007) and the lack of access to external networks and links with entrepreneurs, investors or innovation communities (Alvarez & Busenitz, 2001). Demonstrating that barriers to creativity negatively affect college students' entrepreneurial intent (Sitaridis & Kitsios, 2020). Among the main barriers of ITSON students are: Lack of skill and experience in creativity and unwillingness to do different things. With regard to entrepreneurial intention, students manifest actions such as: 1. My professional goal is to become an entrepreneur, 2. I am determined to create a company in the future, 3. I have thought about starting a company and 4. I intend to start a company someday. It is indicated that in order to generate entrepreneurial intention it is necessary to eliminate barriers. Camacho and Campo (2017) They mention that there are no external barriers to being an entrepreneur, who are key to economic development and to reducing youth unemployment. The third scenario of the study analyzes the results of H3, verifying the effects of internal barriers of creativity on the entrepreneurial self-efficacy of young university students at ITSON. Finding that internal creativity barriers significantly and negatively affect students' entrepreneurial self-efficacy, resulting in low levels of self-efficacy. This is due to: Lack of skill and experience in creativity and being unwilling to do different things. Likewise, actions related to entrepreneurial self-efficacy are highlighted, such as: evaluating the demand for new products or services, establishing a competitive price and calculating the amount of capital needed to start a business. The study's findings show that college students tend to reduce their self-efficacy when they face barriers to their creative development. These barriers can be internal or external, suggesting that educational institutions and social environments work together to create environments that are conducive to innovation and entrepreneurship (Dilag, 2023). Being aspects that are related to the social cognitive theory of Bandura (1986), since self-efficacy beliefs influence motivation based on outcome expectations (Bandura, 1995). In addition, research on Lüthje & Franke (2003), indicate that perceived barriers impact students' entrepreneurial behavior, suggesting that business creation depends on socioeconomic and cultural context. Entrepreneurship is a generator of employment (Saavedra García, 2020). The main findings indicate that: Unemployment mainly affects young people, which makes it necessary to have a better entrepreneurial education and young university students want to undertake innovative ideas or family backgrounds in business, although they face barriers.

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