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Determinants of Entrepreneurial Behavior among Female University Students: The Mediating Role of Entrepreneurial Intention



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A B S T R A C T

Entrepreneurship in the university setting has gained increasing relevance as an engine of economic and social development; however, further evidence is needed to better understand how individual and contextual factors jointly influence entrepreneurial behavior among female university students. This study aims to analyze the mediating role of entrepreneurial intention in the relationship between attitude, self-efficacy, and institutional support in shaping entrepreneurial behavior in female university students. To test the hypotheses, a quantitative

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approach using partial least squares structural equation modeling (PLS-SEM) was employed with a sample of 380 female university students from an institution with campuses in Peru, Paraguay, and the United States. The results show that entrepreneurial intention has the strongest effect on entrepreneurial behavior, while self-efficacy influences it both directly and indirectly, and attitude is primarily linked to it through intention. Likewise, institutional support has an indirect impact through its effect on attitude and self-efficacy. The mediating role of intention is confirmed, with partial mediation for entrepreneurial behavior and full mediation in the relationships involving institutional support. The study contributes to the extension of TPB-based research by integrating individual and contextual determinants of entrepreneurial behavior among female university students in the Latin American higher education context.

KEYWORDS: *entrepreneurial intention, entrepreneurial behavior, self-efficacy, institutional support, female university students*

Introduction

Entrepreneurship has become central to economic and social development, especially in environments where sustainable growth depends on job creation and innovation (Calanchez et al., 2022; Zaidan et al., 2024). In this context, higher education institutions have begun to play a prominent role in training individuals with skills geared towards creating new initiatives, not only through the generation of technical knowledge but also through competencies related to decision-making and opportunity identification (Adesola & Datta, 2020; Valenzuela-Keller et al., 2021). Along these lines, academic interest has focused on explaining the factors that lead some students to show a greater inclination towards entrepreneurship, with entrepreneurial intention being the most prominent construct in the pre-action phase (Uzkurt et al., 2025).

From a theoretical perspective, entrepreneurial intention has been extensively explained by the Theory of Planned Behavior (TPB), which proposes that human behavior is preceded by an intentional disposition resulting from cognitive appraisals (Ajzen, 1991; Ajzen, 2020). Thus, attitudes toward entrepreneurial behavior, subjective norms, and perceived behavioral control constitute the main antecedents of intention, allowing us to understand how the possibilities of undertaking entrepreneurship and the capacity to do so are valued (Krishna & Agrawal, 2026; Li, 2025). Within academia, this theory has been used on numerous occasions to study

entrepreneurial intention, as it explains how individual perceptions are shaped into a predisposition that leads to action (Uzkurt et al., 2025). Building on this theoretical foundation, subsequent entrepreneurship research has also incorporated complementary contextual variables to extend the explanatory scope of the TPB in specific educational settings, particularly when examining entrepreneurship among university students (Rahman et al., 2022).

From this perspective, the literature has focused on analyzing the determinants of entrepreneurial intention, highlighting attitude and self-efficacy as key determinants in this process (Anjum et al., 2023). Attitude toward entrepreneurship refers to how individuals evaluate the desirability of starting a business (Jena, 2020), while self-efficacy is linked to the belief in one's ability to undertake an entrepreneurial venture (Elnadi & Gheith, 2021), which helps explain the extent to which students feel they possess the necessary skills to embark on an entrepreneurial experience (Heinemann et al., 2022).

For its part, the educational context, through institutional support, also builds these values, helping to develop positive attitudes and increase self-confidence (Frolova et al., 2021). In this regard, institutional support has increasingly been examined as a contextual factor that complements the individual determinants proposed by the TPB by fostering favorable entrepreneurial attitudes and strengthening entrepreneurial self-efficacy within higher education environments (Gonzalez-Tamayo et al., 2024). Accordingly, institutional support is conceptualized in this study as a contextual antecedent that complements, rather than replaces, the original TPB constructs.

In this sense, the analysis of entrepreneurship among women pursuing university studies acquires particular relevance, given that this type of entrepreneur presents specific conditions that influence how they make decisions related to entrepreneurship (Cunha et al., 2024). Several studies indicate that, although women's participation in entrepreneurship has been steadily increasing in recent years, gaps persist due to social, cultural, and resource access factors that can limit the development of entrepreneurial initiatives (Adesola & Datta, 2020; Drakpa et al., 2022). At the same time, the university context emerges as a key space where these perceptions can be formed, as it allows for learning, networking, and offers incentives that could contribute to the consolidation of entrepreneurial intentions in women (Messikh, 2021; Yuan et al., 2025). In this sense, studying how women's

entrepreneurship behaves within the university context allows us to examine the phenomenon in a more contextualized way.

While previous studies have substantially advanced the understanding of entrepreneurial intention and its determinants, they have predominantly examined individual antecedents or partial relationships derived from the Theory of Planned Behavior (Adu et al., 2020; Rueda et al., 2022). However, although the literature has independently addressed how attitude, self-efficacy, and institutional support are associated with entrepreneurial intention, comparatively fewer studies have simultaneously integrated these individual and contextual determinants to explain entrepreneurial behavior through entrepreneurial intention within a single explanatory framework (Bao & Xiao, 2026; Nessel et al., 2024). Accordingly, the contribution of the present study does not lie in proposing new theoretical constructs but in extending existing TPB-based research by integrating these complementary dimensions into a unified explanatory model focused on female university students in the Latin American higher education context.

Likewise, there is a limited number of studies that specifically address female entrepreneurship in the university setting, particularly in the Latin American context, where social and educational dynamics have their own characteristics (Gallegos et al., 2024). Although evidence on female entrepreneurial intention has expanded considerably in recent years, studies integrating individual and contextual determinants within Latin American university settings remain comparatively limited. In this regard, it is necessary to approach the reality of how the determinants of entrepreneurial intention are integrated and their relationship with possible entrepreneurial behavior in female university students from a perspective that articulates individual and contextual dimensions (Abbasianchavari & Moritz, 2021; Sleiman et al., 2026).

In this context, the present study aims to analyze the mediating role of entrepreneurial intention in explaining the relationships among the individual and contextual factors associated with entrepreneurial behavior among female university students. Specifically, it examines the relationships among attitude, self-efficacy, and institutional support, considering the mediating role of intention in the proposed model. From a theoretical perspective, the study extends prior TPB-based entrepreneurship research by integrating individual and contextual determinants into a single explanatory model for female university students. Rather than proposing a new theoretical framework, the study contributes by providing empirical

evidence on how these complementary dimensions are jointly associated with entrepreneurial behavior in the Latin American higher education context. Furthermore, from a contextual perspective, it provides empirical evidence within the Latin American university setting, where social and educational dynamics present specific characteristics that shape the development of female entrepreneurship.

Theoretical Framework and Hypotheses

Theory of Planned Behavior (TPB)

TPB posits that behavior is preceded by intention, which is understood as a person's disposition to carry out an action (Ajzen, 1991). In the field of entrepreneurship, this theory provides a robust framework for explaining the cognitive antecedents of entrepreneurial intention and behavior (Galvão et al., 2024; Heinemann et al., 2022). Within this framework, entrepreneurial intention enables us to link individual perceptions to action (Ahmed et al., 2025; Zovko et al., 2020).

The intention does not appear spontaneously, but rather originates from cognitive appraisals such as attitude toward entrepreneurship, which refers to the individual's assessment of the possibility of undertaking a business, and self-efficacy, which involves the perception of one's own ability to do so (Lyu et al., 2024). Because the university environment can influence both, the TPB is suitable for examining entrepreneurial behavior in female university students.

Recent studies have further demonstrated the applicability of the TPB for explaining entrepreneurial intention among female university students across different higher education contexts (Rahman et al., 2022). In the present study, institutional support is incorporated as a contextual antecedent that complements, rather than replaces, the original TPB constructs, thereby extending the theory's explanatory scope within the university environment.

Entrepreneurial Attitude and Self-efficacy in the Formation of Intention and Behavior

Attitudes toward entrepreneurship are one of the main cognitive appraisals involved in shaping entrepreneurial intentions (Heinemann et al., 2022; Jena, 2020). A favorable attitude toward the possibility of

entrepreneurship tends to increase an individual's inclination to consider this option (Anjum et al., 2023; Nessel et al., 2024). In the university setting, attitudes are influenced by educational experiences and exposure to environments that value entrepreneurial activity. Thus, a positive attitude facilitates the generation of intention and can influence the likelihood of taking action (Vamvaka et al., 2020; Ye & Kang, 2025).

On the other hand, entrepreneurial self-efficacy reflects how individuals perceive their ability to perform tasks associated with entrepreneurship, and can explain how prepared a person feels to undertake an action or activity that leads to the creation of a new business (Abaho et al., 2015). Greater self-efficacy increases entrepreneurial intention by reducing the uncertainty linked to the action and, sometimes, can also influence entrepreneurial behavior (Elnadi & Gheith, 2021; Ghouse et al., 2024).

Attitude and self-efficacy influence the intention to undertake entrepreneurial action, which is considered the immediate antecedent of behavior (Ključnikov et al., 2025). Furthermore, self-efficacy can directly influence action, although its effect is less significant than that mediated by intention (Caputo et al., 2025). Based on this, the following hypotheses are proposed:

H1: Entrepreneurial attitude has a positive effect on entrepreneurial intention in female university students.

H2: Entrepreneurial intention has a positive effect on entrepreneurial behavior in female university students.

H3: Entrepreneurial self-efficacy has a positive effect on entrepreneurial behavior in female university students.

H4: Entrepreneurial self-efficacy has a positive effect on entrepreneurial intention in female university students.

Institutional Support and Development of Entrepreneurial Perceptions

Institutional support plays a crucial role in the university setting, as it shapes the context in which students begin to develop an understanding of entrepreneurship (Anjum et al., 2023; Dieguez & Gomes, 2025). It is not only the availability of resources, but also the way in which the institution articulates experiences, spaces, and dynamics that bring students closer to entrepreneurial activity (Frolova et al., 2021; Gonzalez-Tamayo et al.,

2024). Thus, the environment can influence how entrepreneurship is perceived, potentially fostering a greater appreciation for this alternative (Ip, 2024; Yi, 2021).

On the one hand, this support is also related to entrepreneurial self-efficacy, as it strengthens the perception of the ability to carry out specific actions related to business creation (Ciptono et al., 2023; Zhang & Chen, 2024). Participation in training activities, access to tools, and contact with contexts that foster innovation allow students to reduce some initial doubts (Nowiński et al., 2019). This does not imply that the action will materialize, but it does mean that students feel more prepared to consider it as a real possibility (Atmono et al., 2023; Mahfud et al., 2025).

In short, institutional support is expected to influence entrepreneurial perceptions through the ways in which students interpret their own resources and value entrepreneurship (Yi, 2021). In this sense, it is reasonable to suggest that institutional support is associated with both entrepreneurial attitude and self-efficacy, leading to the following hypotheses:

H5: Institutional support has a positive effect on entrepreneurial attitude in female university students.

H6: Institutional support has a positive effect on entrepreneurial self-efficacy in female university students.

Mediating role of Entrepreneurial Intention

Entrepreneurial intention is widely recognized within the TPB as the most immediate antecedent of entrepreneurial behavior (Anjum et al., 2023). From a theoretical perspective, it represents the mechanism through which entrepreneurial attitude and self-efficacy are expected to be associated with entrepreneurial behavior (Asad et al., 2025; Delzenne et al., 2026; Heteș et al., 2025).

Accordingly, entrepreneurial intention is theoretically expected to mediate the relationship between individual entrepreneurial perceptions and entrepreneurial behavior (Aliedan et al., 2022; Nwibe & Ogbuanya, 2024). Individuals with more favorable entrepreneurial attitudes or stronger entrepreneurial self-efficacy are expected to report higher entrepreneurial intention, which, in turn, is associated with entrepreneurial behavior (Shandilya, 2022).

Similarly, the effects of institutional support are expected to operate indirectly by strengthening entrepreneurial attitudes and self-efficacy, which are theoretically associated with entrepreneurial intention (Bao & Xiao, 2026; Rueda et al., 2022). Therefore, entrepreneurial intention is proposed as the theoretical mediating mechanism linking these antecedents with entrepreneurial behavior (Alvarez-Risco et al., 2021; Barba-Sánchez et al., 2022). Based on the above, the following hypotheses are proposed:

H7: Entrepreneurial intention mediates the relationship between entrepreneurial attitude and entrepreneurial behavior in female university students.

H8: Entrepreneurial intention mediates the relationship between entrepreneurial self-efficacy and entrepreneurial behavior in female university students.

H9: Entrepreneurial attitude mediates the relationship between institutional support and entrepreneurial intention in female university students.

H10: Entrepreneurial self-efficacy mediates the relationship between institutional support and entrepreneurial intention in female university students.

Methodology

The research employed a quantitative approach to examine the relationships among institutional support, entrepreneurial attitude, entrepreneurial self-efficacy, entrepreneurial intention, and entrepreneurial behavior among female university students. The research design was cross-sectional, explanatory, and predictive, as it sought to evaluate both the direct and mediating effects of the proposed model. Data were collected at a single point in time, allowing for an analysis of participants' perceptions of the entrepreneurial process within the university context.

The study population consisted of female university students from a Peruvian higher education institution with campuses located in Peru, Paraguay, and the United States. The sample was drawn using non-probability convenience sampling, considering accessibility and participant availability. A total of 380 students were surveyed who met the criteria of being female, of legal age, and enrolled in university studies at one of the campuses at the time of data collection. This type of sampling is appropriate

for studies conducted in educational contexts, where the population is generally determined by institutional and logistical factors.

The instrument used for data collection consisted of a structured questionnaire with closed-ended questions, designed to measure the constructs considered in the research model. The items were developed based on a review of the specialized literature and adapted to the university context. The initial version of the instrument comprised 32 items; however, after evaluating external biases in the measurement model, those that did not meet the established criteria were eliminated, leaving 27 items. The entrepreneurial behavior construct was operationalized through self-reported preparatory entrepreneurial activities and behaviors associated with business creation rather than the creation and management of an established business.

All items were measured using a five-point Likert scale, where 1 corresponded to "strongly disagree" and 5 to "strongly agree." To ensure content validity, the instrument was reviewed by five experts who assessed the clarity, relevance, and coherence of the items. A pilot test was also conducted to verify participants' understanding of the instrument.

Data collection took place between August and December 2025. The questionnaire was administered using the Google Forms platform. Participants were informed in advance about the study's objectives, confidentiality, and data processing, ensuring anonymity and the academic use of the information. Since the research involved adult participants, the information was collected anonymously using a low-risk questionnaire; therefore, formal approval from an ethics committee was not required, in accordance with institutional guidelines. Participation was voluntary, and informed consent was obtained from all participants before data collection.

Data evaluation was performed using partial least squares structural equation modeling (PLS-SEM) with SmartPLS. Although the proposed model was theoretically grounded in the TPB, PLS-SEM was considered the most appropriate analytical approach because the study simultaneously examined multiple direct and indirect relationships with a predictive orientation and aimed to explain and predict variance in entrepreneurial behavior. Furthermore, PLS-SEM provides robust parameter estimates for complex path models while maintaining high statistical power in prediction-oriented research (Hair et al., 2022; Sarstedt et al., 2022).

The procedure followed was developed in two stages. First, the measurement model was evaluated, considering the reliability indicators, internal consistency, convergent and discriminant validity, as well as the

absence of collinearity problems using VIF values (Sarstedt et al., 2022). Additionally, common method bias was assessed using the full collinearity approach proposed by Kock (2015). The obtained VIF values were below the recommended threshold of 3.3, indicating that common method bias was unlikely to affect the findings.

Second, the structural model was examined, contrasting the proposed relationships and evaluating the path coefficients, the coefficient of determination (R^2), and the predictive relevance (Q^2). Thus, the bootstrapping technique was applied to 5,000 subsamples to evaluate the significance of the coefficients, as well as their confidence intervals. Finally, the mediating effect of entrepreneurial intention on relationships was analyzed in order to understand its role within the model.

Results

The participants were predominantly between 21 and 23 years old, representing 45.53% of the sample, whereas 28.68% were between 18 and 20 years old. In terms of academic progression, a greater proportion of students were concentrated in the first to third academic cycles (37.37%), followed by those enrolled in the fourth to sixth cycles (33.68%). Although most respondents reported no prior entrepreneurial experience (63.95%), a considerable percentage reported having received some form of entrepreneurship education (83.95%).

With respect to the descriptive indicators, entrepreneurial attitude reached the highest average value (M = 3.24; SD = 0.96), while entrepreneurial self-efficacy also showed relatively favorable levels (M = 3.20; SD = 1.05). By comparison, institutional support presented the lowest average value (M = 3.05; SD = 1.12), which may reflect a less consolidated perception of institutional backing for entrepreneurial development among the participants.

The indicators reported in Table 1 suggest an adequate performance of the measurement model. The factor loadings remained above the commonly accepted reference values, and the reliability coefficients were satisfactory across the constructs examined. In the same way, the AVE results supported the convergent validity of the model. Additionally, the VIF values did not indicate relevant collinearity among the variables.

Table 1: Measurement model evaluation: reliability and convergent validity

Construct	Loading range	α	CR	AVE
Entrepreneurial Attitude (EA)	0.795–0.847	0.881	0.913	0.678
Entrepreneurial Behavior (EB)	0.817–0.873	0.895	0.922	0.704
Entrepreneurial Intention (EI)	0.783–0.854	0.907	0.928	0.684
Entrepreneurial Self-efficacy (ESE)	0.771–0.848	0.896	0.920	0.659
Institutional Support (IS)	0.772–0.857	0.868	0.905	0.655

Source: Authors' own elaboration

The discriminant validity of the model is evident in Table 2. On the diagonal, the values exceed the correlations between constructs, indicating that each variable is distinct from the others. The HTMT indices also remain below the recommended threshold. No problematic crossovers between constructs are observed. In this respect, the differentiation between variables is adequate.

Table 2: Discriminant validity (Fornell–Larcker criterion and HTMT ratio)

Construct	EA	EB	EI	ESE	IS
Entrepreneurial Attitude (EA)	**0.824**	0.314	0.481	0.176	0.528
Entrepreneurial Behavior (EB)	0.281	**0.839**	0.637	0.417	0.328
Entrepreneurial Intention (EI)	0.432	0.576	**0.827**	0.420	0.304
Entrepreneurial Self-efficacy (ESE)	0.158	0.375	0.380	**0.812**	0.514
Institutional Support (IS)	0.464	0.288	0.271	0.453	**0.809**

Note: Diagonal elements (bold) represent the square root of AVE (Fornell–Larcker criterion). The upper triangle shows HTMT values; the lower triangle shows correlations.

Source: Authors' own elaboration

The structural relationships indicate that all proposed paths are statistically significant and exhibit positive coefficients. Entrepreneurial intention exhibited the strongest positive association with entrepreneurial behavior, whereas entrepreneurial self-efficacy showed both direct and indirect statistically significant relationships with entrepreneurial behavior. Institutional support was positively associated with entrepreneurial attitude

and entrepreneurial self-efficacy, supporting its proposed role within the conceptual model. These results are shown in Table 3.

Table 3: Structural model results

Hypothesis	Path	β	t- value	p- value	95% CI	Result
H1	EA → EI	0.381	8.772	0.000	[0.300; 0.461]	Supported
H2	EI → EB	0.507	12.461	0.000	[0.428; 0.579]	Supported
H3	ESE → EB	0.182	3.916	0.000	[0.087; 0.267]	Supported
H4	ESE → EI	0.320	8.067	0.000	[0.242; 0.394]	Supported
H5	IS → EA	0.464	12.154	0.000	[0.389; 0.533]	Supported
H6	IS → ESE	0.453	11.641	0.000	[0.378; 0.528]	Supported

Source: Authors' own elaboration

As shown in Table 4, the findings provide statistical support for the proposed indirect relationships. Specifically, partial mediation was observed in the relationships leading to entrepreneurial behavior, whereas full mediation was identified for the indirect relationships between institutional support and entrepreneurial intention. Overall, these results support the mediating structure proposed in the conceptual model.

Table 4: Mediation analysis

Hypothesis	Path	β	t- value	p-value	95% CI	Interpretation
H7	EA → EI → EB	0.193	6.634	0.000	[0.139; 0.247]	Partial mediation supported
H8	ESE → EI → EB	0.162	7.102	0.000	[0.122; 0.207]	Partial mediation supported
H9	IS → EA → EI	0.177	6.903	0.000	[0.130; 0.227]	Full mediation supported
H10	IS → ESE → EI	0.145	7.001	0.000	[0.106; 0.184]	Full mediation supported

Source: Authors' own elaboration

The model's quality indicators, as shown in Table 5, indicate moderate levels of explanatory power for entrepreneurial intention and behavior. Predictive capacity was also supported. In terms of effect size, entrepreneurial intention had the largest effect on entrepreneurial behavior, while the remaining structural relationships exhibited small-to-medium effect sizes.

Table 5: Model quality assessment (R^2, Q^2 and f^2)

Construct / Path	**R^2**	**R^2 Adjusted**	**Q^2**	**f^2**	**Effect size**
Entrepreneurial Attitude (EA)	0.215	0.213	0.178	—	—
Entrepreneurial Self-efficacy (ESE)	0.205	0.203	0.169	—	—
Entrepreneurial Intention (EI)	0.421	0.418	0.312	—	—
Entrepreneurial Behavior (EB)	0.359	0.356	0.268	—	—
EA → EI	—	—	—	0.176	Medium
ESE → EI	—	—	—	0.102	Small
EI → EB	—	—	—	0.344	Large
ESE → EB	—	—	—	0.051	Small
IS → EA	—	—	—	0.274	Medium
IS → ESE	—	—	—	0.258	Medium

Source: Authors' own elaboration

Discussion

Overall, the findings reveal a coherent pattern of relationships among the individual and contextual factors considered in the proposed model, supporting the theoretical assumptions of the Theory of Planned Behavior (Ajzen, 1991). Rather than suggesting a temporal developmental process, the observed associations indicate that entrepreneurial intention constitutes the principal theoretical mechanism linking entrepreneurial attitude and self-efficacy with entrepreneurial behavior within the proposed framework (Barba-Sánchez et al., 2022). This pattern is consistent with recent evidence showing that entrepreneurial intention remains the central explanatory construct for understanding entrepreneurial behavior among female university students, even when complementary contextual factors are incorporated into the analytical model (Ključnikov et al., 2025; Kola et al.,

2026). Consequently, the findings extend previous TPB-based research by highlighting the complementary role of institutional support in explaining entrepreneurial behavior within the Latin American university context.

One of the main findings of this study is that entrepreneurial intention was the strongest predictor of entrepreneurial behavior, reinforcing its central role within the TPB framework (Ching, 2024). This finding suggests that favorable entrepreneurial attitudes and confidence in one's entrepreneurial capabilities are more likely to be reflected in entrepreneurial behavior when they are accompanied by a clear intentional disposition toward entrepreneurship (Ciptono et al., 2023). Rather than indicating a temporal sequence, this pattern supports the theoretical proposition that entrepreneurial intention represents the most immediate cognitive antecedent of entrepreneurial behavior (Heteș et al., 2025). These findings are consistent with previous evidence reported by Rahman et al. (2022) and Nwibe and Ogbuanya (2024), who similarly identified entrepreneurial intention as the principal explanatory mechanism linking individual entrepreneurial perceptions with entrepreneurial behavior.

Entrepreneurial attitude showed a significant effect on entrepreneurial intention, suggesting that a favorable evaluation of entrepreneurship increases the likelihood that female university students will develop a stronger entrepreneurial intention (Anjum et al., 2023; Ye & Kang, 2025). This finding reinforces the importance of entrepreneurial attitude as a cognitive antecedent of intention rather than as a direct determinant of entrepreneurial behavior. Consequently, the results indicate that positive evaluations of entrepreneurship contribute to shaping entrepreneurial intention, which subsequently explains its association with entrepreneurial behavior within the proposed model (Vamvaka et al., 2020). This interpretation is consistent with previous evidence reported by Heinemann et al. (2022) and Drakpa et al. (2022), who found that entrepreneurial attitude is a principal factor associated with entrepreneurial intention among female university students across diverse higher education contexts.

Entrepreneurial self-efficacy exhibited significant effects on both entrepreneurial intention and entrepreneurial behavior. This pattern suggests that entrepreneurial self-efficacy constitutes one of the key cognitive resources associated with entrepreneurial behavior, as students who perceive themselves as capable of undertaking entrepreneurial activities are more likely to develop entrepreneurial intention while also reporting higher levels of entrepreneurial behavior (Ye & Kang, 2025; Zaidan et al., 2024). The

coexistence of direct and indirect effects indicates that entrepreneurial self-efficacy is associated with entrepreneurial behavior both independently and through entrepreneurial intention, highlighting its complementary role within the proposed TPB-based model (Ghouse et al., 2024; Uzkurt et al., 2025). These findings are consistent with previous studies indicating that entrepreneurial self-efficacy is a key element in entrepreneurial decision-making because it influences how individuals evaluate their capability to perform entrepreneurial tasks and respond to entrepreneurial challenges (Abaho et al., 2015; Elnadi & Gheith, 2021).

Institutional support was not directly associated with entrepreneurial intention or entrepreneurial behavior; instead, its influence was reflected through entrepreneurial attitude and entrepreneurial self-efficacy (Gonzalez-Tamayo et al., 2024). This finding reinforces the conceptualization of institutional support as a complementary contextual antecedent within the extended TPB framework, suggesting that the university environment contributes to entrepreneurship primarily by strengthening students' entrepreneurial perceptions rather than directly influencing entrepreneurial behavior (Anjum et al., 2023; Dieguez & Gomes, 2025). This interpretation is consistent with previous evidence indicating that supportive educational environments foster entrepreneurial attitudes and self-efficacy among female university students (Frolova et al., 2021; Messikh, 2021). Accordingly, the present findings suggest that institutional support contributes indirectly to entrepreneurial behavior by reinforcing the cognitive antecedents proposed by the TPB (Rahman et al., 2022; Yi, 2021).

The significant indirect effects observed in the model are consistent with the mediating relationships proposed in the theoretical framework. Specifically, entrepreneurial intention was associated with the relationships between entrepreneurial attitude, entrepreneurial self-efficacy, and entrepreneurial behavior, supporting its central role within the TPB (Aliedan et al., 2022; Zovko et al., 2020). These findings are consistent with previous studies suggesting that entrepreneurial intention represents the principal cognitive mechanism linking entrepreneurial perceptions with entrepreneurial behavior (Nwibe & Ogbuanya, 2024; Rahman et al., 2022). Accordingly, the indirect effects identified in this study reinforce the theoretical relevance of entrepreneurial intention in explaining the association between individual entrepreneurial perceptions and entrepreneurial behavior among female university students.

This study has several limitations that should be considered when interpreting the findings. First, the cross-sectional design does not allow causal or temporal relationships among the variables to be established, although it provides evidence of the statistical associations proposed in the theoretical model. Second, the use of non-probability convenience sampling limits the generalizability of the findings. In addition, the sample was drawn from a single higher education institution with campuses located in different countries; therefore, the results should not be interpreted as representative of all female university students in Latin America. Future studies could employ longitudinal designs, probability sampling, and more diverse institutional settings to further examine the proposed relationships.

Taken together, these findings reinforce the TPB's suitability for explaining entrepreneurial behavior among female university students and show that institutional support provides a complementary contextual perspective. Consequently, the proposed model contributes to a broader understanding of entrepreneurship in higher education by integrating both individual and contextual determinants within a single explanatory framework.

Conclusion

The research findings suggest that entrepreneurial behavior in this group of female university students is explained by the relationships among entrepreneurial intention, entrepreneurial attitude, entrepreneurial self-efficacy, and institutional support within the proposed TPB-based model. In this sense, entrepreneurial intention emerges as the primary driver of behavior, demonstrating that taking action depends not only on the perceived value of entrepreneurship or on one's perceived competence, but also on the development of an intentional disposition associated with these individual and contextual perceptions.

These findings indicate that entrepreneurial behavior among female university students is associated with the interaction of individual and contextual factors rather than being explained by a single determinant. Within the proposed model, entrepreneurial intention represents the principal theoretical construct through which entrepreneurial attitude and entrepreneurial self-efficacy are associated with entrepreneurial behavior, whereas institutional support contributes by strengthening these cognitive antecedents.

Similarly, self-efficacy and entrepreneurial attitude significantly influence intention; however, their associations with entrepreneurial behavior are primarily indirect, reinforcing their enabling role within the model. Self-efficacy plays a more significant role, as it influences both intention and behavior, suggesting that students with higher entrepreneurial self-efficacy are more likely to report entrepreneurial intention and entrepreneurial behavior. Institutional support does not directly influence behavior but rather shapes the context and the set of perceptions that students use to construct their interpretation of entrepreneurship.

Finally, the results support the mediating role of entrepreneurial intention, reinforcing the theoretical relationships proposed in the model. This finding enriches our understanding of entrepreneurial behavior among female university students by indicating that entrepreneurial intention is associated with the relationship between entrepreneurial attitude, entrepreneurial self-efficacy, and entrepreneurial behavior. From this perspective, the study contributes to highlighting the role of the university educational environment as a space that fosters the development of entrepreneurial perceptions and capabilities that, through entrepreneurial intention, may be reflected in entrepreneurial behavior.

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