The Role of Theory of Planned Behavior in Explaining Social Entrepreneurship Intention

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Abstract

Businesses play a crucial role in job creation and act as key drivers of economic growth. Entrepreneurs, who establish and manage businesses, thrive in dynamic and complex environments, particularly when they possess creativity and innovation. Successfully running a business requires both skills and knowledge, which universities help students develop, equipping them for entrepreneurial success. This study aimed to analyze how attitude (ATT), subjective norms (SN), and perceived behavioral control (PBC) influence the entrepreneurial intention (IE) of students from various academic backgrounds during the 2019-2020period. A quantitative, cross-sectional, and causal research design was used, with data collected from 642 students. The study applied the Theory of Planned Behavior (TPB) to explain entrepreneurial intention and used Confirmatory Factor Analysis (CFA) for data interpretation. The results indicate that subjective norms and perceived behavioral control positively influence students' entrepreneurial intention. Based on these findings, it is recommended that academic programs be enhanced to strengthen students' competencies and skills, ultimately preparing them to become future business leaders and job creators.

Key Words: Entrepreneurship, Competencies, Theory of Planned Behavior, Undergraduate Students.

Introduction

Entrepreneurship serves as a pivotal driver of economic expansion and societal advancement, playing a fundamental role in **stimulating employment generation** and **mitigating unemployment rates** (Alshebami et al., 2020; Almohammad et al., 2021). Beyond its economic implications, entrepreneurial endeavors contribute significantly to the broader framework of **sustainable development** (Veleva, 2021). The **synergistic interplay** between entrepreneurial initiatives and socio-economic progress has been well-documented, with research indicating that entrepreneurial activities **propel both economic and social transformation** (Handayati et al., 2020; Lechuga et al., 2021). The

trajectory of national development is inextricably linked to the **entrepreneurial orientation** of its populace, with research and innovation serving as **indispensable catalysts** for fostering and sustaining entrepreneurial growth. Conceptually, entrepreneurship embodies a **dynamic and iterative process of value creation**, characterized by the undertaking of **novel economic activities** aimed at accruing financial gains (Mensah et al., 2021).

Moreover, it encapsulates the **entrepreneurial disposition**, encompassing the motivations, attitudes, and strategic initiatives undertaken by individuals seeking to establish business ventures (Almohammad et al., 2021). This paradigm is particularly salient during periods of economic turbulence, where the **strategic reallocation of resources** becomes imperative to **counteract obsolescence** and facilitate the emergence of innovative enterprises, thereby serving as a buffer against rising unemployment levels. Consequently, the proactive encouragement of entrepreneurship assumes heightened significance during **periods of economic distress** (Nicolás Martínez & Rubio Bañón, 2020).

Entrepreneurship is underpinned by **intrinsic personal attributes**, including **self-efficacy**, **resilience**, **and innovative cognition** (Nicolás Martínez & Rubio Bañón, 2020). However, these characteristics must be **supplemented and reinforced** by a robust foundation in **managerial acumen and technical expertise**. A deficiency in **industry-specific knowledge**, **strategic management capabilities**, **and operational proficiency** presents a significant impediment to entrepreneurial success, necessitating a comprehensive and **systematic approach to skill development and capacity building**.

Entrepreneurial education plays a **pivotal role** in shaping individuals' attitudes toward entrepreneurship (Alshebami et al., 2020; ben Youssef et al., 2021) and fostering entrepreneurial self-efficacy (Kisubi et al., 2021). Consequently, the study of entrepreneurship education within university settings has gained scholarly traction across multiple national **contexts**.Universities serve as incubators of entrepreneurial talent, providing structured guidelines and strategic frameworks for entrepreneurship education (Saldarriaga & Guzmán, 2018). Entrepreneurship necessitates a diverse and adaptable skill set, which can be cultivated through academic instruction and practical engagement (Deveci & Cepni, 2017). In response, integrated pedagogical innovations, universities have business modeling frameworks, and experiential learning methodologies to facilitate entrepreneurial ideation and venture creation (Saldarriaga & Guzmán, 2018).

The **fundamental objective** of entrepreneurship education is to **stimulate entrepreneurial intent** among students and equip future graduates with the requisite

competencies to embark on entrepreneurial endeavors. This can manifest through three **distinct entrepreneurial pathways**. The **first pathway**, **market entrepreneurship**, is **profit-oriented**, where individuals leverage their **business acumen** to establish and sustain enterprises, consequently fostering **employment generation**. The **second pathway**, **social entrepreneurship**, is **socially driven**, emphasizing **alleviation of societal challenges** through innovative business models (Gupta et al., 2020). Social entrepreneurs actively contribute to **societal well-being** (Cruz-Sandoval & Alonso-Galicia, 2022) and **enhance the overall quality of life** (Agustina et al., 2020). The **third pathway**, **political entrepreneurship**, is **influence-based**, where entrepreneurs seek to **capitalize on political structures** for **strategic economic gain** (Podemska-Mikluch, 2021).

To reinforce entrepreneurial capabilities, universities often implement **structured support mechanisms** designed to provide students with **financial**, **educational**, **and strategic resources** for transforming their business concepts into viable enterprises (Saldarriaga & Guzmán, 2018).

These programs not only equip students with the resilience and adaptability necessary to navigate the uncertainties of entrepreneurship (Mensah et al., 2021) but also cultivate a culture of entrepreneurial initiative at an early career stage (Molina, 2020). Accordingly, universities should foster an entrepreneurial mindset, encouraging students to develop and implement innovative business solutions (Sadat & Lin, 2020).Beyond formal entrepreneurial aspirations (Rijati et al., 2022). A widely recognized framework for analyzing these factors is the Theory of Planned Behavior (TPB) (Ajzen, 1991). TPB posits that entrepreneurial intention is influenced by three primary constructs: subjective norms (SN), perceived behavioral control (PBC), and attitude (ATT). Empirical evidence suggests that perceived behavioral control exhibits a strong correlation with students' entrepreneurial intentions (Khadri et al., 2020).

Although extensive research has examined the entrepreneurial intentions of university students using TPB, there exists a **notable research gap** concerning the **entrepreneurial experiences and intentions of students in public Peruvian universities**. Scholars have emphasized the **necessity of expanding entrepreneurship research in developing economies** (Lechuga et al., 2021; Al-Jubari, 2019) and **replicating existing theoretical models** within diverse socio-economic contexts (Al-Jubari, 2019). This study aims to **enrich the existing body of knowledge** on entrepreneurship by offering **empirical insights** into the entrepreneurial inclinations of university students. Furthermore, the findings are expected to inform the **development**

of targeted educational strategies aimed at strengthening students' entrepreneurial orientation through the provision of specialized knowledge and skills.

Additionally, this study serves as a **practical resource** for institutions seeking to **nurture an entrepreneurial ecosystem**, offering **valuable insights** for **academics**, **educators**, **policymakers**, **and entrepreneurship consultants** to devise **effective intervention strategies** for **promoting entrepreneurship**.

In response to this overarching inquiry, this study seeks to address the following

Research question:

"To what extent do Attitude (ATT), Perceived Behavioral Control (PBC), and Subjective Norms (SN) exert a positive influence on entrepreneurial intention?"

Theoretical Framework

Entrepreneurship and Universities

Entrepreneurship, research, and innovation should be fostered from an early stage, particularly within university settings (Rijati et al., 2022). As outlined in University Law, one of the fundamental responsibilities of professors is to advance knowledge and drive innovation through rigorous research within their respective disciplines. Entrepreneurship, research, and innovation should be encouraged from an early stage, particularly in universities (Rijati et al., 2022).

According to University Law, one of the primary responsibilities of professors is to generateknowledge and foster innovation through rigorous research in their respective fields (Educación, 2014, p. 527224), as innovation is fundamental to entrepreneurship. Universities play a crucial role in cultivating an entrepreneurial mindset among students by equipping them with the necessary knowledge and skills to become successful entrepreneurs. Professors, in turn, can motivate and strengthen students' competencies, thereby enhancing their ability to navigate the entrepreneurial landscape. Research suggests that exposure to entrepreneurship educationsignificantly influences entrepreneurial intention (Draksler & Sirec, 2021), meaning that students who receive entrepreneurship training are more likely to pursue entrepreneurial ventures (Bui et al., 2020).

Entrepreneurs, Entrepreneurship, and Entrepreneurial Intention

The **COVID-19 pandemic (SARS-CoV-2)** drastically reshaped the global economic landscape. Social distancing measures and successive waves of infection led to business closures and economic instability, highlighting the necessity for businesses to reinvent

themselves through technological advancements and innovative products and services. This period reinforced the importance of entrepreneurship, as many individuals who lost their jobs turned to self-employment and business creation as a means of financial survival. Entrepreneurship is broadly defined as a combination of competencies essential for establishing businesses, including value creation, adaptability to innovation, effective communication, creativity, and self-efficacy (Jardim, 2021). The European Commission conceptualizes entrepreneurship as "the mindset and process to create and develop economic activity, blending risk-taking, creativity, and innovation with sound management, within a new or existing organization" (Commission, 2003, p. 6).

Recent findings in the Global Competitiveness Report emphasize the importance of entrepreneurship in job creation and economic recovery in the post-pandemic era (Schwab & Zahidi, 2020). Entrepreneurship is more than a process—it is a state of mind that motivates individuals to create value within organizations (Bird, 1988). This entrepreneurial mindset drives individuals to adopt behaviors that are essential for initiating and sustaining business ventures.

Entrepreneurs, particularly those with innovative ideas, seek to transform their visions into profitable enterprises (Mensah et al., 2021). Depending on the stage of their ventures, entrepreneurs are typically categorized as:

- 1. **Nascent entrepreneurs** individuals in the early stages of business creation or self-employment.
- 2. Active entrepreneurs individuals who have already established and are operating their businesses.

Entrepreneurs assume risks and responsibilities in bringing their ideas to life, making strategic decisions that influence the success of their enterprises (Mensah et al., 2021).

Determinants of Entrepreneurial Intention (EI)

Research on entrepreneurial behavior suggests that individuals choose entrepreneurship based on a combination of personal characteristics and external environmental factors (Kennard, 2021). Personal traits that influence entrepreneurial intention include:

- A strong desire for independence
- Confidence in goal achievement
- A high tolerance for risk
- High levels of creativity and innovation

Meanwhile, environmental factors such as societal norms, family background, and educational exposure to entrepreneurship also play a crucial role in shaping individuals' entrepreneurial aspirations (Kennard, 2021).

Entrepreneurial intention (EI) refers to an individual's aspiration and commitment to start a business after careful evaluation and planning (Bae et al., 2014; Kumar & Das, 2019, p. 5). It is recognized as a critical predictor of entrepreneurial behavior (Amofah & Saladrigues, 2022) and is strongly linked to the desire to develop innovative ideas and transform them into tangible business opportunities (Mensah et al., 2021; Rueda et al., 2021; Sadat & Lin, 2020).

Theory of Planned Behavior (TPB) and Entrepreneurial Intention

The **Theory of Planned Behavior (TPB)** is one of the most extensively applied frameworks for explaining **entrepreneurial intention** (Entrialgo& Iglesias, 2016). Originally proposed by Ajzen (1985) and later refined with empirical validation (Ajzen, 1991), TPB was designed to explain human behavior by assessing intentionality and decision-making processes. Over time, its application has been extended to various fields, including entrepreneurship, where it helps to identify the key psychological and social determinants that shape individuals' entrepreneurial aspirations.

The **Theory of Planned Behavior (TPB)** serves as a comprehensive framework for analyzing the determinants influencing students' entrepreneurial decisions (Davis et al., 2002), with a particular focus on individual cognition and social influence. This theory underscores three principal psychological constructs that shape intentions: (1) Attitude (ATT) toward a behavior, (2) Subjective Norms (SN) reflecting perceived social expectations, and (3) **Perceived Behavioral Control (PBC)**, which denotes an individual's self-assessed capacity to execute the behavior successfully.

An **attitude** toward a behavior is conceptualized as an individual's evaluative disposition, encompassing both favorable and unfavorable perceptions regarding the potential execution of an action (Ajzen, 2002). Within an entrepreneurial framework, intention embodies the motivational force propelling an individual toward entrepreneurial conduct (Alshebami et al., 2020), and entrepreneurial intention, specifically, encapsulates the aspiration to establish a business, which is contingent on one's attitudinal stance toward entrepreneurial activities (Mensah et al., 2021).

The TPB paradigm has been extensively employed in empirical investigations to assess the magnitude of entrepreneurial intention (EI) among university students(Khadri et al., 2020).Additionally, TPB has beensynthesized with alternative theoretical models, such asSelf-Determination Theory (Al-Jubari, 2019), and has beenintegrated with other constructs **to** yielda more nuanced understanding of entrepreneurial intent (Ahmed et al., 2017; Contreras-Barraza et al., 2021; Mensah et al., 2021; Romero-Colmenares& Reyes-Rodríguez, 2022).

Attitude toward Entrepreneurship (ATE)

Attitude toward a behavior is characterized as "the degree to which an individual holds a positive or negative assessment of the behavior in question" (Ajzen, 1991, p. 188). As a general principle, an individual's propensity to engage in a particular action is positively correlated with a favorable attitude toward that action, as well as with supportive subjective norms and a strong sense of perceived control (Ajzen, 1991). Given that intention represents the most reliable predictor of entrepreneurial conduct (Ajzen, 1991), investigating the antecedents of entrepreneurial intentions is instrumental in comprehending the mechanisms underlying business creation.

Extensive empirical research has established a significant correlation between attitude and entrepreneurial intention (EI) (Sampene et al., 2022; Al-Jubari, 2019). However, it is important to recognize that scholarly discourse contains divergence regarding the magnitude and consistency of this relationship (Zhang et al., 2015). Consequently, the following hypothesis is formulated:

Hypothesis 1 (H1): Attitude exerts a positive influence on entrepreneurial intention.

Subjective Norms (SN) and Entrepreneurial Intention

Subjective norms (SN) refer to "the perceived social pressure to perform or abstain from a particular behavior" (Ajzen, 1991, p. 188). In the domain of entrepreneurship, subjective norms encapsulate an individual's perceptions regarding the societal expectations and values surrounding venture creation (Gieure et al., 2019, p. 3).

Subjective norms hold particular salience for individuals with limited entrepreneurial experience (Zhang et al., 2015), as they derive guidance from external social cues. Empirical investigations consistently underscore the influence of subjective norms on entrepreneurial intention (EI) (Gieure et al., 2019; Rambe et al., 2017; Rueda et al., 2021). Essentially, SN reflects the perceived degree of support or opposition an individual anticipates from their social environment—including family, friends, and professional networks—when contemplating entrepreneurial pursuits (Sadat & Lin, 2020). As such, external pressures and societal expectations can significantly shape entrepreneurial aspirations (van Gelderen et al., 2008; Contreras-Barraza et al., 2021).

Thus, the following hypothesis is proposed:

Hypothesis 2 (H2): Subjective norms exert a positive influence on entrepreneurial intention.

Perceived Behavioral Control (PBC) and Entrepreneurial Intention

The third fundamental component of TPB is Perceived Behavioral Control(PBC), which denotes "an individual's perception of the ease or difficulty associated with performing a

given behavior" (Ajzen, 1991). Within an entrepreneurial context, PBC corresponds to one's self-assessment of their skills, intellectual capacity, resilience in overcoming challenges, and ability to surmount obstacles encountered in the entrepreneurial process (Gieure et al., 2019).

PBC aligns closely withself-efficacy, which is defined as"individuals' beliefs circumstances" (Bandura, 1991, p. 257). In essence, perceived behavioral control encapsulates one's subjective confidence in their ability to engage in entrepreneurial activities and achieve success (Sadat &Lin, 2020).

Consequently, the following hypothesis is formulated:

Hypothesis 3 (H₃): Perceived behavioral control exerts a positive influence on entrepreneurial intention.

Figure 1 illustrates the conceptual framework of the study, outlining the key variables and the proposed research model. The analysis focuses on three primary constructs: students' attitude (ATT) towards entrepreneurship, subjective norms (SN) reflecting perceived societal expectations, and perceived behavioral control (PBC), which represents individuals' self-assessed ability to engage in entrepreneurial activities.



Methodology

Research Design and Sample

This research employed a **quantitative methodology**, utilizing a **non-experimental** and **cross-sectional** design to analyze the entrepreneurial intentions of university students. The target population comprised **Peruvian undergraduate students** from diverse academic disciplines, including **Administration**, **Software Engineering**, and **Industrial Engineering**, who were enrolled during the **2019–2020 academic year**. A **non-probabilistic sampling technique** was adopted, resulting in a final sample of **642 students**. Of these, **409 participants (63.7%) were female**, while **233 (36.3%) were male**. Furthermore, **53% of respondents had prior entrepreneurial experience**, whereas **47% had none**. Additionally, **58.9% of students reported belonging to an entrepreneurial family**, highlighting the potential influence of familial business exposure on their entrepreneurial aspirations.

Instrument and Data Collection

For the purpose of data collection, this study utilized an adapted version of the questionnaire originally developed by Zhang et al. (2015), designed to evaluate the constructs of Attitude (ATT), Subjective Norms (SN), and Perceived Behavioral Control (PBC). The instrument was structured into five sections, encompassing a total of 17 items, distributed as follows:

- 1. Entrepreneurial Intention (EI) Three items assessing the respondent's inclination to initiate a business, their willingness to exert effort in business management, and their aspiration to become an entrepreneur.
- 2. Entrepreneurial Attitude (ATT) Three items gauging the students' predisposition towards entrepreneurship.
- 3. Subjective Norms (SN) Three items capturing the perceptions of students regarding the influence of peers, family, and colleagues on their entrepreneurial aspirations.
- 4. Perceived Behavioral Control (PBC) Three items measuring students' self-efficacy in successfully accomplishing entrepreneurial tasks, achieving set objectives, and overcoming challenges.
- 5. Demographic and Background Information Five items related to participants' personal characteristics.

A five-point Likert scale was employed to quantify responses, with values ranging from 1 (Strongly Disagree) to 5 (Strongly Agree). To ensure the reliability and internal consistency of the instrument, a Cronbach's alpha analysis was conducted, yielding a coefficient of 0.826. As this value surpasses the conventional threshold of 0.7, it indicates an acceptable level of reliability, affirming the robustness and dependability of the

measurement instrument for assessing entrepreneurial intention and its influencing factors. The questionnaire items utilized to assess students' entrepreneurial intention demonstrated a high degree of reliability. Table 1 presents the Cronbach's alpha values for each variable set, confirming the internal consistency of the measurements.

Table 1		
Cronbach Alpha S	core for Questionnaire Items	
Variable	Alfa de Cronbach	
ATT	0.773	
SN	0.731	
PBC	0.806	
IE	0.804	

Data Analysis

The data was analyzed using the Statistical Package for the Social Sciences (SPSS) and AMOS 23.0, with Confirmatory Factor Analysis (CFA) applied to assess the data

Result and Discussion

The findings from the descriptive analysis indicate that the mean scores for the Perceived Behavioral Control (PBC) factor (ranging from 3.83 to 3.92) surpass those recorded for Attitude (ATT) (ranging from 3.13 to 3.51) and Subjective Norms (SN) (ranging from 3.05 to 3.25) (refer to Table 2).Regarding ATT, a notable proportion of students assigned high ratings (scores of 4 and 5) to the respective items: 48.7% expressed enjoyment in their entrepreneurial pursuits, 34.8% emphasized the significance of financial gains, and 42.1% indicated a preference for dedicating more time to activities they find pleasurable. Concerning PBC, the majority of students exhibited strong self-efficacy, with 72.0% reporting confidence in successfully executing entrepreneurial tasks, 71.7% expressing certainty in their ability to achieve predetermined goals, and 75.1% demonstrating resilience in overcoming obstacles.

Finally, in relation to SN, social influences played a varying role in shaping entrepreneurial intentions. Specifically, 40.2% of students believed that their family expected them to pursue entrepreneurship, 32.7% perceived encouragement from friends to become entrepreneurs, and 46.9% felt that influential individuals in their lives endorsed their entrepreneurial aspirations.

Items	Mean	Standard Deviation
ATT1	3.51	1.03
ATT2	3.13	1.00
ATT3	3.28	1.03
SN1	3.22	1.13
SN2	3.05	0.97
SN3	3.25	1.05
PBC1	3.83	1.04
PBC2	3.87	1.07
PBC3	3.92	1.13
IE1	3.63	1.08
IE2	3.64	1.03
IE3	3.65	1.05

To validate the proposed theoretical model, a two-step process was followed. First, Confirmatory Factor Analysis (CFA) was conducted to confirm the structure of the model by identifying which observed variables correspond to specific constructs. Second, validation criteria were applied to assess the reliability and convergence of the constructs.

This included ensuring that the Average Variance Extracted (AVE) was at least 0.50, Convergent Validity (CV) was greater than 0.70, and Composite Reliability (CR) exceeded 0.70. Additionally, the hypotheses were tested through a causality analysis. To evaluate the model's overall fit, several goodness-of-fit indices were examined, including the normalized Chi-square, Goodness-of-Fit Index (GFI), Comparative Fit Index (CFI), and Root Mean Square Error of Approximation (RMSEA). Table 3 outlines the ideal acceptance levels for these indices.

The first measurement model (Model No. 1) yielded the following results: Chi-square/df = 7, CFI = 0.87, GFI = 0.91, and RMSEA = 0.10. These values indicated that the model did not meet the acceptable thresholds, as Chi-square/df exceeded 5, CFI was below 0.90, and RMSEA was above 0.08, suggesting that further refinements were necessary. Figure 2 presents the factor loadings and path coefficients for Attitude (ATT), Subjective Norms (SN), and Perceived Behavioral Control (PBC).Following a review, two items (ATT2 and ATT3) were removed, and the analysis was repeated. The revised model (Model No. 2) produced improved but still inadequate results: Chi-square/df = 6, CFI = 0.94, GFI = 0.92, and RMSEA = 0.08. Although the CFI and GFI values indicated a better fit, the Chi-square/df remained above 5, and RMSEA was still on the borderline, necessitating further

adjustments. After another assessment, three additional items (IE1, ATT1, and SN3) were removed to enhance the model's fit.



The analysis was conducted once more, and the updated results indicated the following values: Chi-square/df = 5, CFI = 0.97, GFI = 0.97, and RMSEA = 0.08. Since these results met the necessary validity and reliability criteria after the removal of a total of five items, no further modifications were made, and the analysis was finalized. Table 3 presents the fit indices for the three models—Model No. 1, Model No. 2, and Model No. 3—allowing for a comparison of their measurement fit.

Table 3 Measurement Mode	el Fit Indexes						
Measurement model fit			Model Nº1		Model Nº2	Moo	del №3
	Level of acceptance (ideal)	Index	Level of acceptance	Index	Level of acceptance	Index	Level of acceptance
Chi-square/df	>1 y < 5	7.62	Does not comply	6.46	Does not comply	5.21	Complies
GFI	≥ 0.8	0.91	Complies	0.94	Complies	0.97	Complies
CFI	≥ 0.9	0.87	Does not comply	0.92	Does not comply	0.97	Complies
RMSEA	≤ 0.08	0.10	Does not comply	0.08	Does not comply	0.08	Complies

Given the values obtained, Model No. 3 can be deemed valid and reliable for the observed data, as supported by Hair et al. (2009). Figure 3 presents the final measurement model, illustrating the refined structure after adjustments.



Table 4 presents the factor loadings, squared loadings, and AVE values for Model No. 1, Model No. 2, and Model No. 3. In Model No. 3, all factor loadings exceed 0.66, and the AVE values fulfill the criteria for convergent validity by being greater than 0.50. This confirms that the model's fit indices are within acceptable ranges.

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AVE

0.68

0.52

0.59

	Variables	Model Nº1			Model Nº2			Model Nº3	
	observed	Factor Loading *	Loading squared	AVE	Factor loading *	Loading squared	AVE	Factor loading *	Loading squared
IE	IE1	0.70	0.48	0.53	0.68	0.46	0.47		
	IE2	0.79	0.62		0.79	0.63		0.78	0.61
	IE3	0.69	0.48		0.83	0.69		0.86	0.75
ATT	ATT1	0.90	0.80	0.48	0.31	0.10		-	-
	ATT2	0.57	0.32		-	-		-	2
	ATT3	0.56	0.32		. 2	-		-	-
SN	SN1	0.71	0.50	0.48	0.70	0.49	0.48	0.78	0.61
	SN2	0.67	0.45		0.68	0.46		0.66	0.44
	SN3	0.69	0.48		0.69	0.48		-	-
PBC	PBC1	0.74	0.55	0.59	0.74	0.55	0.59	0.74	0.55

0.73 Note .* Standardised Regression Weights

0.82

PBC2

PBC3

Table 4

Findings and Discussion of the Hypothesis

0.68

0.54

Following the structural equation modeling analysis of entrepreneurial intention among university students, the ATT factor items were removed to achieve a well-fitting model. A similar study that applied TPB to examine entrepreneurial intention in Malaysian university students (Khadri et al., 2020) also found no significant correlation between ATT and IE, leading to the rejection of Hypothesis 1. Empirical findings validate Hypothesis 2, in alignment with TPB, confirming that SN has a positive influence on IE, with a path coefficient of 0.54. This indicates that students who are surrounded by supportive friends and family members encouraging them to pursue entrepreneurship exhibit stronger entrepreneurial intentions. Similar conclusions were drawn from prior research conducted on Malaysian (Al-Jubari, 2019) and Spanish university students. However, Khadri et al. (2020) reported no significant correlation between SN and IE in their study.

0.82

0.74

0.67

0.54

0.82

0.74

0.67

0.54

Hypothesis 3 is also supported by empirical evidence, demonstrating that PBC positively impacts students' entrepreneurial intentions, with a path coefficient of 0.64. Students who exhibit confidence in their ability to complete tasks, accomplish goals, and overcome challenges show a higher likelihood of pursuing entrepreneurship. Those who trust in their competencies tend to have greater autonomy and resilience in tackling obstacles.

These findings align with prior studies, which also indicate a strong positive effect of PBC on IE (Contreras-Barraza et al., 2022). Furthermore, research by Barba-Sánchez et al. (2022) reinforces the significant role of PBC in shaping entrepreneurial intentions. In summary, students with a strong sense of control over their ability to achieve goals and those whose social circles encourage entrepreneurial pursuits are more likely to develop an intention to start a business. The empirical results supporting these hypotheses are detailed in Table 5.

Table	5	
Empiri	cal Testing of Hypotheses	
Нурс	othesis	Supported
H1	Attitude has a positive effect on entrepreneurial intention	No
H2	Subjective norms have a positive effect on entrepreneurial intention.	Yes
H3	Perceived behavioural control has a positive effect on entrepreneurial	Yes
	intention.	

Discussion

Entrepreneurship has become more significant than ever before. Gaining insights into entrepreneurship and identifying the factors that shape university students' entrepreneurial intentions is crucial for scholars, researchers, and policymakers. This study contributes to the body of knowledge on entrepreneurial intentions within the Peruvian academic context. Developing students' entrepreneurial competencies early, particularly at the university level, equips them with essential skills for the professional world. While numerous studies have applied the Theory of Planned Behavior (TPB) to assess students' entrepreneurial intentions, research focusing on Peruvian students remains limited. This paper utilizes TPB and its key components—Attitude (ATT), Subjective Norms (SN), and Perceived Behavioral Control (PBC)-to explain students' entrepreneurial intentions (IE), employing structural equation modeling for data analysis. The findings revealed that ATT did not have a significant impact on IE. This aligns with previous research, including studies conducted by Zhang et al. (2015) and Khadri et al. (2020). However, the results demonstrated that SN significantly influences IE. This finding underscores the role of family and social environment in fostering entrepreneurial aspirations, as social factors shape students' intentions to start a business. These results

are consistent with studies by Al-Jubari (2019) and Sampene et al. (2022), although they contradict findings from Sadat & Lin (2020) and Su et al. (2021).

Furthermore, the study found a positive correlation between PBC and IE, reinforcing conclusions from prior research (Fragoso et al., 2020). The results align with TPB-based studies that predict students' entrepreneurial behaviors. Among students who rated PBC-related statements with scores of 4 or 5, 72.0% expressed confidence in their ability to perform tasks successfully, 71.7% believed they could achieve their goals, and 75.1% felt capable of overcoming obstacles. According to Ajzen (1991), a higher level of perceived control strengthens an individual's intention to engage in a particular behavior.

Like Al-Jubari (2019), this study emphasizes the relevance of TPB in understanding entrepreneurship and highlights the scarcity of research on this topic in developing nations. Given these findings, entrepreneurial education should be enhanced to foster greater perceived behavioral control and positive attitudes among aspiring entrepreneurs. Entrepreneurial intention is driven by one's belief in their ability to accomplish goals and by encouragement from family, peers, and colleagues. This research provides a foundation for future studies, which could explore additional variables such as the impact of educational programs on students' entrepreneurial intentions. Further research could investigate variations in IE between students at public and private universities, as well as differences based on students' chosen fields of study. Additionally, studies could focus on graduating students to determine how their entrepreneurial intentions evolve over time. As this study was cross-sectional, longitudinal research could be conducted to assess whether graduates who participated in entrepreneurship courses developed an entrepreneurial mindset. A key limitation of this study is that its findings cannot be widely generalized, as the sample was drawn from a single university. However, future studies incorporating data from multiple public universities could enhance the generalizability of the results.

Conclusion

Entrepreneurship plays a crucial role in the economic growth of nations by driving job creation and innovation. In recent years, the global spread of SARS-CoV-2 and its subsequent disruptions have forced businesses and educational institutions to adapt their operational models to sustain their services. This shift has further highlighted the importance of fostering entrepreneurship, particularly among university students who represent the next generation of job creators. To better understand students' entrepreneurial intentions, this study applies the Theory of Planned Behavior (TPB), a well-established framework for explaining entrepreneurial motivation. The research focuses on three key factors: attitude, subjective norms, and perceived behavioral control.

The results indicate that subjective norms and perceived behavioral control positively influence entrepreneurial intention, aligning with prior research. However, the study did not find a significant relationship between attitude and entrepreneurial intention.

These findings suggest the need to strengthen students' entrepreneurial mindset by integrating courses on innovation, entrepreneurship, and business creation into various academic programs. Future research could enhance this model by incorporating additional variables such as the role of education, research, and family background in shaping entrepreneurial intention. Additionally, longitudinal studies could be conducted to assess the long-term impact of entrepreneurial training on students' aspirations and career choices.

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