

Research Article

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Exploring the Role of University, Environmental, and Government Support in Shaping Students' Entrepreneurial Attitudes and Intentions: Evidence from Saudi Arabia

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Abstract

Background/purpose. Entrepreneurship plays a crucial role in promoting economic growth, job creation, and unemployment reduction. This study aims to investigate how government and institutions influence students' attitudes and intentions toward entrepreneurship.

Materials/methods - Between May 01, 2024, and June 30, 2024, a survey was conducted involving 400 students at Prince Mohammad bin Fahd University (PMU) to assess the impact of university education and surrounding circumstances on students' entrepreneurial aspirations. Data was analyzed using SPSS 26, employing linear regression analysis to test the hypotheses

Results – The finding show a positive impact of the government, institutions towards students entrepreneurial intentions.

Conclusion – This study highlights the vital role of government, institutions, and the surrounding environment in shaping the entrepreneurial intentions of young students. Universities, Schools, and policymakers build up a positive attitude towards students' entrepreneurial intentions, fostering economic growth and development.

1. Introduction

Entrepreneurship is a process of innovation and the creation of new ventures (Karim *et al.*, 2024; Kirkley, 2016). Through this, entrepreneurship adds value and develops the countries' economy with new products, diversifying markets and increasing social welfare (Esfandiar *et al.*, 2019). As a result, it is also an essential component in job creation and decreases the unemployment ratio in societies (Komninos *et al.*, 2024). *"Entrepreneurship is about turning what excites you in life into capital so you can do more of it and move forward with it."* ~ Richard Branson

The prior researchers indicated continue to investigate the factors that contribute to an individual's emergence as an entrepreneur (Shahneaz *et al.*, 2020; Zhang *et al.*, 2014), despite the essential nature of possessing an entrepreneurial mentality. To address this topic, one must first comprehend the factors that affect the inclination to participate in entrepreneurial endeavors. These elements encompass the influence of university education on the initiation of new enterprises and entrepreneurial conduct, alongside the role of governmental regulations and the support offered by the business environment in fostering these behaviors (Rahman *et al.*, 2024; O'Gorman, 2019).

The researchers want to address the question: "How do students perceive the support offered by the government, universities, and the environment for entrepreneurship?" In what conditions do students' perceptions of governmental support, university assistance, and environmental backing together influence their attitudes toward entrepreneurship? In what manner do students' perceptions of governmental aid, university support, and environmental backing together influence entrepreneurial intentions to establish their own enterprises?

The objective of the aforementioned questions is to examine students' viewpoints about the support offered by the government, universities, and the environment for entrepreneurial activities. Furthermore, we want to examine the synergistic effects of these supports on students' entrepreneurial mindsets and to analyze the influence of perceived assistance from the government, the institution, and the environment on students' intentions to establish their own enterprises.

The literature lacks a definitive definition of entrepreneurial aim, despite its significance as a term. This is due to the absence of a clearly defined consensus on a definition. Entrepreneurial intention is defined as the deliberate mental state that focuses personal attention, enthusiasm, experience, and actions on intended entrepreneurial endeavors, such as launching a new business or establishing a new venture (Mohaimen *et al.*, 2025; Neneh & Dzomonda, 2024; Bhatta *et al.*, 2024). This concept has been suggested by Mohaimen *et al.* (2025), Neneh & Dzomonda (2024), and Bhatta *et al.*

However, Fayolle and Gailly (2015) indicated that the concept of entrepreneurial purpose and its antecedent elements have garnered significant attention in recent years within the academic discourse. This is due to its use in predicting entrepreneurial behavior and comprehending the formation of aspirations to participate in entrepreneurial activities. The present article delineates the literature review and the formulation of hypotheses, after the introductory part. Subsequent to the presentation of the data collection, methods, and findings of the inquiry, the conclusion, consequences, and limits of the study are delineated.

2. Literature Review

To better understand the mechanisms or factors that drive and create entrepreneurial intentions in people or students, various scholars often focus on a psycho-sociological concept that originated in the mid-1980s, namely the Theory of Planned Behaviour developed by Ajzen (Ajzen, 1991). According to the Theory of Planned Behaviour (TPB), a person's intentions are primarily determined by his/her attitude toward conduct, perception of behavioural control, and subjective norm. To put it plainly, these elements represent the willingness and effort people must put forth to carry out the

behaviour (Wach & Wojciechowski, 2016). TPB has been applied in various research where behavioural assessment was conducted (for example, Tanchi *et al.*, 2025; Uzir *et al.*, 2025; Ismael *et al.*, 2025; Al Amin *et al.* 2024a; Al Amin *et al.* 2024b; Hasan *et al.*, 2023; Amin & Salehin, 2021; Amin & Rubel, 2020).

From the entrepreneurship perspective, TPB also helps to understand business preparation plans and processes, how these two factors influence entrepreneurship training programs, the participants' predisposition toward these courses, and the persistence of their potential effects on entrepreneurship intentions (Fayolle & Gailly, 2015). Because of this, TPB is a compelling theory that can help understand and explain students' intentions of entrepreneurship.

In this study, before explaining entrepreneurial intention further, we will explain the importance of entrepreneurial education, how it shapes students' entrepreneurial intentions and the grounded hypotheses of this study.

Recent developments in entrepreneurship studies have heightened the need for entrepreneurship education since it plays an essential role in shaping attitudes, intentions, and mindsets regarding entrepreneurship (Suguna *et al.*, 2024; Shahneaz *et al.*, 2020). The critical role of entrepreneurship education among students in universities developing entrepreneurial intentions influences their attitudes and motivates them to create enterprises shortly (Gazi *et al.*, 2025c; Rahaman *et al.*, 2025; Venesaar *et al.*, 2006). Notably, the crucial point of this investigation is to include the social support of the universities, internship support and laboratory experiences in enterprises sustained by the government for the students (Chen & Gan, 2021; Shahneaz *et al.*, 2013). Students can gain practical experience and exposure to real-world entrepreneurial environments (Knox, 2022). This supportive approach will help enhance their learning about entrepreneurship and close the gap between theoretical knowledge and practical application in the real world.

On the other hand, this kind of support will allow the students to engage in entrepreneurship through internships and other related activities; students will also be able to develop essential skills such as critical thinking and innovation (Gazi *et al.*, 2024a; Gazi *et al.*, 2024e; Lynch *et al.*, 2021). Furthermore, the partnership between universities and government-backed businesses guarantees that students obtain the vital resources, guidance, and backing to turn their entrepreneurial concepts into feasible business ventures (Soluk *et al.*, 2021).

Additionally, from the theoretical perspective, it has also been pointed out that TPB educational support for entrepreneurship enhances the understanding of the belief, attitude and intention relationship; individuals' beliefs and attitudes regarding entrepreneurship would inform their intention to become entrepreneurs (Gazi *et al.*, 2025b; Pulka *et al.*, 2014). Due to the comprehensive entrepreneurship education provided by universities and the government's support, a culture of entrepreneurship is fostered (Wei *et al.*, 2019). This equips students with the confidence and capability to pursue entrepreneurial endeavours after graduation.

A variety of factors influence the entrepreneurial intentions of students. Despite differences at the macro or micro levels, most of these factors significantly impact the formation of their future entrepreneurial intentions, reflecting the growing interest among students in entrepreneurship as a career option. Both personal and environmental factors, including education and training in entrepreneurship, prior entrepreneurial experience, and demographic characteristics, shape these intentions. Moreover, government policies that provide resources and reduce barriers, university programs that offer entrepreneurship education and support, and a conducive entrepreneurial environment all play critical roles in shaping students' entrepreneurial aspirations (Azad *et al.*, 2023). The interaction between these forms of support creates a robust ecosystem that fosters entrepreneurial intentions, thereby contributing to the development of future entrepreneurs.

Following the TPB and above-discussed literature support, the present study proposes the research framework below in Figure 1:

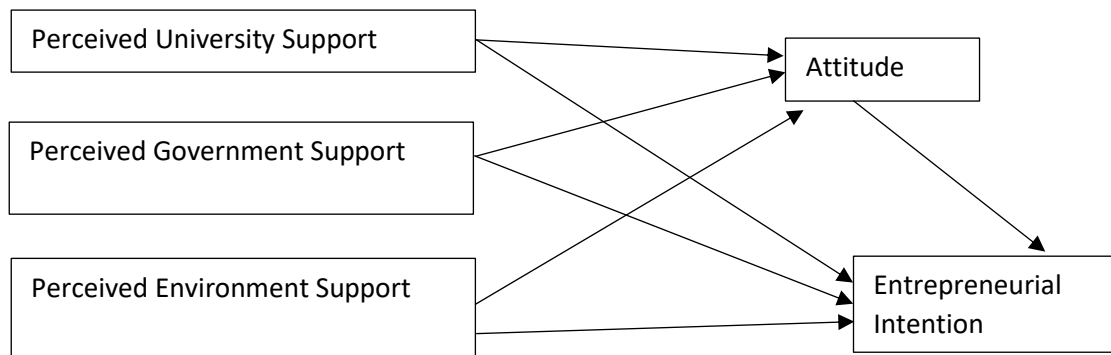


Figure 1: Research Framework

This study is remarkable because it examines how the components of entrepreneurial situational of university students' behaviour when they engage in entrepreneurial activities, which may not be the consequence of deliberate decision-making. However, the TPB may be appropriate in explaining how these behaviours could be influenced by habits or particular environmental signals. This research fills a knowledge gap on how students' entrepreneurial activities are shaped by unconscious and spontaneous cognitive processes that are impacted by environmental signals by integrating entrepreneurial situational elements and implementation intents into the Theory of Planned Behavior in a novel way. As a result, the following hypotheses are put forth:

H1: Perceived university support positively affects entrepreneurial intention

H2: Perceived government support positively affects entrepreneurial intention

H3: Perceived environmental support positively affects entrepreneurial intention

H4: Attitude towards entrepreneurship positively affects entrepreneurial intention

H5: The association of perceived support and entrepreneurial intention can be mediated by attitude towards entrepreneurship

H6: The link between perceived government support and entrepreneurial intention can be mediated by attitude towards entrepreneurship

H7: The connection between perceived environmental support and entrepreneurial intention can be mediated by attitude towards entrepreneurship

3. Methodology

This study follows the quantitative research approach. The study uses a quantitative research design to investigate the entrepreneurial intentions of university students in Saudi Arabia; It collects data using the survey method between May 01, 2024, and June 30, 2024. Survey questions are created to measure the university's education and environmental factors' role in making students' entrepreneurial intentions. A total of 400 students took part in the study. After collecting the data, the SPSS 26 statistical package was used to analyse the data and test the hypotheses using linear regression analyses. Based on the results of the analyses, both hypotheses are supported.

In thi study, quantitative methods were chosen to facilitate the collection of measurable data, enable statistical analysis, and provide a robust framework to measure the influence of various factors related to the entrepreneurial intentions of university students. Previously, several studies (for example, Ullah *et al.*, 2024; Mollah *et al.*, 2024b; Karim *et al.*, 2023a; Yu *et al.*, 2024; Amin & Oláh, 2024; Hosain *et al.*, 2024; Islam *et al.*, 2024a; Islam *et al.*, 2024b; Amin *et al.*, 2024); Mahmud *et al.*,

2023; Qing *et al.*, 2023; Karim *et al.*, 2023b) conducted similar studies using similar methodology in different fields and contexts.

The study focuses on a population comprising university students in Saudi Arabia, emphasising PMU due to its size, diversity, and accessibility. Both junior and senior (final year) students from various majors in the business studies fields, were targeted to capture insights from different stages of their academic journey. All these students take the course entrepreneurship as part of their study requirement.

A purposive sampling technique was employed to select students who could provide relevant insights into the research questions. While this non-probability sampling method may limit the generalizability of the findings, it ensures a focused examination of the subject matter. Moreover, as the sampling frame was not available, a previous study (for example, Gazi *et al.*, 2024b; Kassim *et al.*, 2024; Mustafi *et al.*, 2024; Gazi *et al.*, 2024c; Mollah *et al.*, 2024a; Rabbi *et al.*, 2024; Gazi *et al.*, 2024d; Gazi *et al.*, 2025a; Mollah *et al.*, 2024c;) suggested using non-probability sampling in case of unavailability of population list.

Data was gathered using a structured questionnaire distributed via Google Forms. The questionnaire included closed-ended and open-ended questions designed to comprehensively explore students' entrepreneurial intentions and the factors influencing them. To ensure a representative sample, the survey was distributed across various faculties at PMU. The initial target sample size was 600 students, and data collection occurred between May 01, 2024, and June 30, 2024.

The questionnaire was developed based on existing literature and validated scales. It covers demographic information, entrepreneurial intentions, perceived barriers, and motivators for entrepreneurship. Academic experts reviewed the questionnaire to ensure its validity and reliability.

The data was analyzed using SPSS and Smart-PLS software, as well as a mixture of descriptive and inferential statistical methods.

The researchers of this study rigorously assessed the instrument's psychometric properties for measurement model validation purposes. Outer loadings and McDonald's Omega Cronbach's alpha and composite reliability were used to establish reliability (Hair *et al.*, 2017). The validity of the constructs was assessed via validity testing, which included the convergent validity of AVE values, discriminant validity verification by HTMT ratios, and cross-loadings of the constructs (Fornell & Larcker, 1981; Rönkkö & Cho, 2020).

Partial Least Squares Structural Equation Modeling (PLS-SEM) was then used to analyze the structural model based on its robustness when dealing with complex models and small sample sizes, as Hair *et al.* (2021) explained. Evaluation based on goodness of fit used SRMR (Cohen, 1988), while exploratory power and predictive relevance were computed using R^2 and Q^2 respectively, following Wong (2016).

Inferential statistics, using hypothesis testing, which included regression and correlation analysis, was used, and a statistical significance was set at $p < 0.05$. An analytical approach that was comprehensive and more holistic in its tests of variable relationships and methodologically rigorous was used.

4. Results

Assessment of Measurement Model

Indicator reliability assessment is the first step of the measurement model. So, we have assessed the outer loadings as suggested by Hair *et al.* (2017). The threshold value of indicator reliability is 0.708 which is maintained by all the item loadings except AtE1 (0.669) and AtE2 (0.687). These two

loadings were not removed as removing them would not bring any impact on the constructs' reliability and validity (refer to appendix 1). Thus, Table 2 shows that the confirmatory factor analysis (CFA) results for the measurement model are robust, regardless of the inclusion of AtE1, Eln7 and AtE2:

Table 1. Outer Loadings of CFA

	AtE	Eln	PES	PGS	PS
AtE1	0.669				
AtE2	0.687				
AtE3	0.922				
AtE4	0.828				
AtE5	0.867				
Eln1		0.733			
Eln2		0.794			
Eln3		0.712			
Eln4		0.875			
Eln5		0.738			
Eln7		0.696			
PES 1			0.759		
PES 2			0.701		
PES 4			0.886		
PGS2				0.835	
PGS3				0.892	
PGS4				0.857	
PGS5				0.900	
PGS6				0.855	
PS1					0.817
PS2					0.869
PS3					0.846
PS4					0.843
PS5					0.864
PS6					0.789
PS7					0.793

The assessment of Cronbach's alpha, McDonald's omega (ω), and composite reliability (ρ_a and ρ_c) confirms the internal consistency of the constructs, as recommended by Hair et al. (2017). Additionally, the Average Variance Extracted (AVE) values meet the acceptable threshold of 0.50, ensuring convergent validity.

As presented in Table 2, all constructs exhibit acceptable reliability and validity. Although the Cronbach's alpha for the PES is slightly lower at 0.699, its McDonald's omega (ω) is 0.739, composite reliability (ρ_c) is 0.828, and Average Variance Extracted (AVE) is 0.618, all of which exceed the recommended thresholds. This supports the robustness of the measurement model illustrated in Table 2.

Table 2. Output from CFA

Factors	Cronbach's Alpha	McDonald's omega (ω)	Composite Reality (rho_a)	Composite reliability (rho_c)	Average Variance Extracted (AVE)
AtE	0.856	.858	0.885	0.898	0.641
EIn	0.854	.822	0.86	0.891	0.578
PES	0.699	.739	0.767	0.828	0.618
PGS	0.919	.920	0.926	0.939	0.754
PS	0.926	.926	0.938	0.94	0.692

It has been found that the Cronbach's alpha of PES is above 0.60 but lower than 0.70. Still, we keep this construct, as Chin (2010) mentioned, with an acceptable value between 0.60 and 0.80. Moreover, PES is considered to be an important independent variable for this study, which was discussed in the literature review section. So, we did not remove PES from the model and kept it for further assessment. The minimum composite reliability value is 0.80, whereas Hair *et al.* (2014) suggested verifying convergent validity. The threshold value of AVE is a minimum of 0.50. In this study, the AVE value of all the constructs is above 0.50 (0.578-0.754). Furthermore, the discriminant validity was assessed through the HTMT ratio, Fornell and Larcker and cross-loadings. Hair *et al.* (2017) state that the threshold value is 0.85 or 0.90. The HTMT ratio of all the constructs is below 0.85, which indicates that each of the constructs is distinct from the other. Moreover, Fornell and Larcker's value and cross-loadings of the constructs also meet the requirements suggested by Fornell & Larcker (1981) and Chin, (2010). The Fornell and Larcker outcome shows acceptable discriminant validity as $\sqrt{AVE}$ values are higher than corresponding correlations. Also, the cross-loadings of each item are heavily loaded on its intended constructs. The following Tables 3 and 4 show the HTMT ratio:

Table 3. HTMT Ratio

	AtE	EIn	PES	PGS	PS
AtE					
EIn	0.85				
PES	0.657	0.534			
PGS	0.502	0.356	0.584		
PS	0.419	0.486	0.366	0.433	

Table 4. Fornell and Larcker

	AtE	EIn	PES	PGS	PS
AtE	0.801				
EIn	0.751	0.76			
PES	0.558	0.436	0.786		
PGS	0.457	0.338	0.461	0.868	
PS	0.394	0.456	0.319	0.403	0.832

Also, the cross-loadings of each item are heavily loaded on its intended constructs. Table 5 presents cross-loadings:

Table 5. Cross Loadings

	AtE	EIn	PES	PGS	PS
AtE 1	0.669	0.536	0.28	0.24	0.345
AtE2	0.687	0.441	0.385	0.357	0.264
AtE3	0.922	0.714	0.427	0.33	0.341
AtE4	0.828	0.558	0.397	0.421	0.253
AtE5	0.867	0.703	0.669	0.46	0.366
EIn1	0.489	0.733	0.475	0.099	0.252
EIn2	0.443	0.794	0.262	0.118	0.283
EIn3	0.548	0.712	0.422	0.257	0.468
EIn4	0.678	0.875	0.297	0.381	0.438
EIn5	0.528	0.738	0.33	0.314	0.363
EIn7	0.669	0.696	0.222	0.299	0.239
PES1	0.372	0.396	0.759	0.197	0.291
PES2	0.29	0.175	0.701	0.431	0.155
PES4	0.583	0.399	0.886	0.473	0.278
PGS2	0.434	0.283	0.372	0.835	0.425
PGS3	0.416	0.262	0.516	0.892	0.408
PGS4	0.428	0.376	0.329	0.857	0.274
PGS5	0.382	0.285	0.405	0.9	0.282
PGS6	0.291	0.236	0.39	0.855	0.371
PS1	0.308	0.389	0.244	0.352	0.817
PS2	0.233	0.326	0.297	0.242	0.869
PS3	0.308	0.454	0.285	0.403	0.846
PS4	0.189	0.237	0.142	0.295	0.843
PS5	0.401	0.458	0.303	0.313	0.864
PS6	0.457	0.365	0.319	0.33	0.789
PS7	0.28	0.327	0.195	0.38	0.793

To further assess the discriminant validity of the constructs, the study employed techniques recommended by Rönkkö and Cho (2020), specifically the Confidence Interval Confirmatory Factor Analysis (CICFA(sys)) and the chi-square-based method (χ^2 (sys)). These methods provide a robust evaluation by analyzing factor correlations and comparing constrained and unconstrained models.

Table 6 displays the correlation estimates, their bias, and the 95% confidence intervals (CIs) for the relationships between constructs. The findings reveal that the upper bounds of the CIs fall below the critical threshold of 0.90, thereby supporting discriminant validity. Furthermore, the χ^2 (sys) test was performed, with no significant issues identified, as all χ^2 difference values remained within the acceptable range.

Table 6. Discriminant Validity Assessment Using CICFA(sys) and χ^2 (sys)

Factors	Original sample (O)	Sample mean (M)	Bias	2.5%	97.5%
EIn <-> AtE	0.673	0.672	-0.001	0.591	0.736
PES <-> AtE	0.566	0.569	0.003	0.475	0.641
PES <-> EIn	0.465	0.470	0.005	0.369	0.539
PGS <-> AtE	0.449	0.448	-0.001	0.304	0.578
PGS <-> EIn	0.305	0.306	0.000	0.151	0.443
PGS <-> PES	0.452	0.451	-0.000	0.305	0.579
PS <-> AtE	0.360	0.362	0.002	0.226	0.489
PS <-> EIn	0.468	0.472	0.004	0.339	0.578
PS <-> PES	0.322	0.328	0.006	0.190	0.436
PS <-> PGS	0.402	0.400	-0.002	0.254	0.533

Assessment of Structural Model

According to Hair *et al.* (2017), collinearity is needed to assess where the VIF value has to be less than 5. The VIF value of all the constructs is shown in Table 7 below:

Table 7. VIF Values

	VIF
AtE 1	1,719
AtE2	1,515
AtE3	3.983
AtE4	2,263
AtE5	3.215
EIn1	3,119
EIn2	3,865
EIn3	1,696
EIn4	3,306
EIn5	2,225
EIn7	1,759
PES1	1,267
PES2	1,418
PES4	1,578
PGS2	2,222
PGS3	3,206
PGS4	2,394
PGS5	3,531
PGS6	2,752
PS1	3,485
PS2	3.809
PS3	2,695
PS4	3,219
PS5	2.93
PS6	2.34
PS7	2,484

The R^2 value would help us know about the model's explanatory power. According to Cohen (1988), R^2 values of 0.75, 0.50, and 0.25 are considered considerable, moderate, and weak. The R^2 value of Ein is 0.597, representing that the model has 59.7% explanatory power of the variance of the dependent variables, and it is also substantial. Table 7 demonstrates the R^2 values of this study:

According to Hair et al.'s guidelines, a significant model fit is indicated by standardized root mean square (SRMR) values below 0.08 (Hair et al., 2021). This study's SRMR value was 0.064, signifying a significant model fit. The determination coefficient (R^2) values should also be greater than 0.25 (Hair et al., 2013). The findings indicate that independent variables explained 59.1%, 39 of the variance in EIn and AtE respectively. Furthermore, the Q^2 value was higher than zero, demonstrating the significance and predictive relevance of the study model (Wong, 2016).

Table 7. R^2 values

Predictor(s)	F ²	Outcome	R ²		Q ² predict	SRMR	NFI
AtE	0.405	EIn	0.597	0.591	0.308	0.064	0.939
PES	0.044						
PGS	0.013						
PS	0.252						
PES	0.198	AtE	0.39	0.383	0.367		
PGS	0.203						
PS	0.132						

Furthermore, the P-value has been assessed to determine the acceptance or rejection of the hypothesis (Hair *et al.*, 2014). The P-value must be less than 0.05 to be accepted. The following Figure 2 and Table 8 show the P-values and the path coefficients:

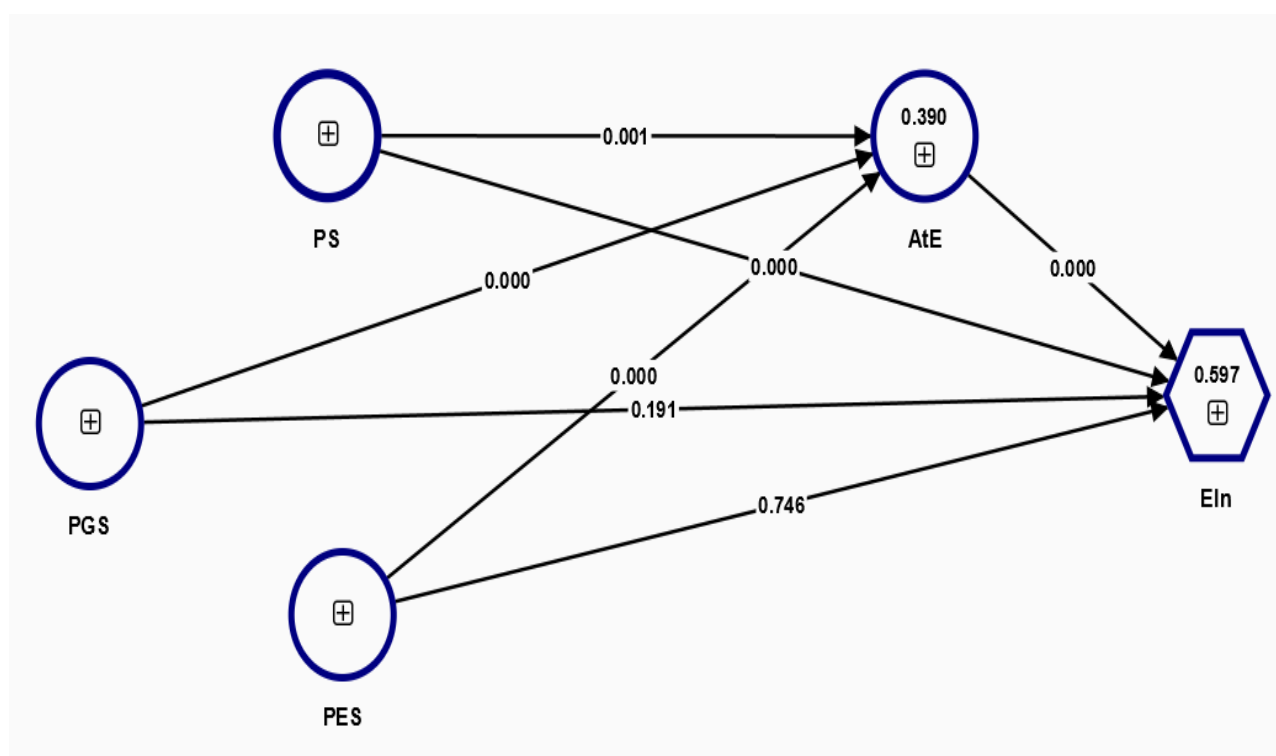


Figure 2: Path Coefficients

Additionally, the following Table 8 represents the path coefficient and p values of this study:

Table 8. Path Coefficients Values (P-Values)

Paths	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistic (O/STDEV)	P values
AtE → EIn	0.692	0.691	0.038	18.042	0.000
PES → AtE	0.41	0.41	0.05	8.246	0.000
PES → EIn	0.015	0.014	0.047	0.323	0.746
PGS → AtE	0.193	0.192	0.055	3.522	0.000
PGS → EIn	-0.068	-0.067	0.052	1.308	0.191
PS → AtE	0.185	0.188	0.053	3.477	0.001
PS → EIn	0.206	0.207	0.053	3.852	0.000

Post Hoc Analysis:

The mediation analysis evaluates the role of attitude toward entrepreneurship (AtE) as an intermediary variable in the relationship between various support factors and entrepreneurial intentions (EIn). As shown in Table 9, attitude toward entrepreneurship significantly mediates the effects of perceived environmental support (PES), perceived government support (PGS), and perceived university support (PS) on entrepreneurial intentions. Full mediation (VAF > 80%) is observed in the relationship between PES and EIn through AtE (VAF = 0.950), indicating that AtE fully explains the link between PES and entrepreneurial intentions. In contrast, partial mediation (20% < VAF < 80%) is found in the relationships between PGS and EIn (VAF = 0.663) and PS and EIn (VAF = 0.383), suggesting that while AtE plays a significant mediating role, other factors also contribute to these relationships.

The Variance Accounted For (VAF) values further emphasize the importance of attitude toward entrepreneurship in translating various forms of support into entrepreneurial intentions. No evidence of non-mediation (VAF < 20%) was found, implying that AtE consistently influences entrepreneurial intentions across different support factors.

Table 9. Hypothesis Result (Indirect Effects)

Paths	Indirect effect	Total effect	Variance Accounted For (VAF)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistic (O/STDEV)	P values
PES → AtE → EIn	0.284	0.299	0.950	0.283	0.037	7.676	0.000
PGS → AtE → EIn	0.134	0.202	0.663	0.133	0.039	3.431	0.001
PS → AtE → EIn	0.128	0.334	0.383	0.13	0.039	3.32	0.001

5. Discussion

Considering creating entrepreneurial intentions, this study aims to find out how entrepreneurial intentions can be created. To understand the effect on entrepreneurial intentions, this study uses five variables: perceived university support, perceived government support, perceived environmental

support, attitude towards entrepreneurship and entrepreneurial intentions. The outcome of the analysis reveals that perceived university support positively affects entrepreneurial intentions ($p=0.00$). This outcome of the present study was similar to the result of the previous investigation of Liu *et al.* (2022). On the other hand, perceived environmental support was not found to have a positive impact on entrepreneurial intentions ($p=0.746$), which is the opposite of the findings of Su *et al.* (2021). Perceived government support was also not found to positively affect entrepreneurial intentions. This outcome is similar to the outcome of Peng & Walid, (2022) and dissimilar to Su *et al.*, (2021). The respondents of this study were university students. Most of the respondents of this study feel that universities should take initiatives such as industry collaboration, curriculum development and student engagement to create or increase the intention for entrepreneurship as they have fewer expectations from the business environment and government of Saudi Arabia. According to Schade & Schuhmacher, (2022), unplanned road, air, or other physical transportation and communication infrastructures, unorganized supportive government policy, trade and commerce legislation, and so on are the primary barriers to infrastructure development. That is why Aloulou & Al-Othman, (2021) suggested that more focus on infrastructure development can be beneficial for the entrepreneurs of Saudi Arabia. So, to create entrepreneurial intentions, this study found a positive effect of attitude towards entrepreneurship ($p=0.00$). These findings are similar to the study findings by Botsaris & Vamvaka, (2016).

This study found the mediating relationship of attitude towards entrepreneurship between perceived university support ($p=0.01$), perceived government support ($p=0.01$), perceived environmental support ($p=0.00$) and entrepreneurial intention. This outcome is similar to the findings from the studies by Su *et al.*, (2021). According to Botsaris & Vamvaka, (2016), attitudes are likely to impact intentions more, which resembles this study's mediating outcomes.

5.1. Summary of Hypothesis Results

H1: Perceived university support positively affects entrepreneurial intention	Accepted
H2: Perceived government support positively affects entrepreneurial intention	Not Accepted
H3: Perceived environmental support positively affects entrepreneurial intention	Not Accepted
H4: Attitude towards intention positively affects entrepreneurial intention	Accepted
H5: The association of perceived support and entrepreneurial intention can be mediated by attitude towards entrepreneurship	Accepted
H6: The link between perceived government support and entrepreneurial intention can be mediated by attitude towards entrepreneurship	Accepted
H7: The connection between perceived environmental support and entrepreneurial intention can be mediated by attitude towards entrepreneurship	Accepted

6. Implications

The study implies practitioners may benefit from the results of this study in focusing on supporting student entrepreneurs whose ideas are generally out-of-the-box. They can assist these young risk-takers with knowledge and consultancy in terms of developing the concepts,

marketability, feasibility studies, financing, and managing the operation of the new entrepreneurial firm. Moreover, they can help direct these entrepreneurs to sources of funds and to incubator centres that have the resources needed to further develop these entrepreneurial concepts and encourage these entrepreneurs to take the step forward and change their intention into action. On the other hand, academia is to agree on the factors that affect entrepreneurial intentions and entrepreneurial attitudes. This study provides additional scientific proof that the availability of government support, educational/university support, and environmental support does positively affect the entrepreneurial attitude of young adults (Islam *et al.* 2018). From the perspective of the Theory of Planned Behaviour, this means that academia can build on the results to further investigate the types of factorial support under question. Moreover, these entrepreneurial intentions can be transferred into entrepreneurial attitudes of investment and launching new business initiatives in general. Academia may need to research the contextual factors underpinning this transformative decision process further (from initiative to attitude/action).

Practitioners may benefit from the results of this study in focusing on supporting student entrepreneurs whose ideas are generally out-of-the-box. They can assist these young risk-takers with knowledge and consultancy in terms of developing the concepts, marketability, feasibility studies, financing and managing the operation of the new entrepreneurial firm. Moreover, they can help direct these entrepreneurs to sources of funds and to incubator centers that have the resources needed to further develop these entrepreneurial concepts and encourage these entrepreneurs to take the step forward and change their intention to action.

7. Limitations and Future Research

It is also important to mention that the limitations of the study include, first, the sampling process that only targeted one university. Despite having a diverse student background from different social classes, the sample itself remains limiting. The second limitation refers to the depth of the statistical analysis undertaken, being limited by the sample size's representativeness. Future studies on entrepreneurial intentions and attitudes may build on the above results and focus on the student background and the existence of previous entrepreneurial initiatives in the family as a motivating instigating factor of entrepreneurial attitudes and risk-taking behaviour of young adults.

8. Conclusion

The study investigates how students perceive government support, university support, and environmental support in their entrepreneurial intentions and whether these intentions develop into or are instigated to be reflected in entrepreneurial attitude. By posing this question, the study expands on the Theory of Planned Behaviour (Ajzen, 1991), to highlight the entrepreneurial attitude that entrepreneurial intentions may drive. Undergraduate business studies students were surveyed as they all take the course on entrepreneurship as part of their program, and due to the large initiatives in the Saudi environment supporting initiatives and entrepreneurial investments since the launch of Vision 2023, many funds have been created, and a large number of seed funders and incubators have been established for this purpose, making the Saudi environment an excellent context to test our hypotheses (Ministry of Education, Saudi Arabia, 2020).

The results of the study highlight the positive effect of situational contextual variables on the outcome. The government support through lighter processes and funding, university support through education and knowledge sharing, and environmental support through acceptance of entrepreneurialism and calculated risk-taking initiatives, all together affect the students' entrepreneurial intentions, and these intentions on their entrepreneurial attitude. The results complement the questions raised by Zhang *et al.* (2014) on understanding entrepreneurship and align with what Kirkley (2016) describes as the creation of new ventures. Moreover, these results support Esfandiar *et al.* (2019) in highlighting the importance of entrepreneurial initiatives toward market

diversification, society's welfare improvement, and decreasing unemployment (Komninos et al., 2024). Finally, the effect of government, university, and environmental support for entrepreneurial initiatives positively contributes to shaping entrepreneurial intentions and behaviours, as suggested by O'Gorman (2019). These intentions are the fuel that will push for entrepreneurial attitudes and decisions to invest in new economic activities and launch a new business concept. The importance of such findings in a traditionally conservative environment marks a change in perception and magnitude of social change effected in the last 8 years since 2016, the launch of the national Vision 2030 in Saudi Arabia (Ministry of Education, Saudi Arabia, 2020).

Declaration

Data Availability Statement. Data will be provided upon request.

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Appendix I.**Table 1.** Outer Loadings of CFA Without Low Loading Factors

Factors	AtE	Eln	PES	PGS	PS
AtE3	0.930				
AtE4	0.836				
AtE5	0.923				
Eln1		0.779			
Eln2		0.831			
Eln3		0.733			
Eln4		0.839			
Eln5		0.772			
PES1			0.786		
PES2			0.702		
PES4			0.871		
PGS2				0.835	
PGS3				0.894	
PGS4				0.855	
PGS5				0.901	
PGS6				0.856	
PS1					0.815
PS2					0.872
PS3					0.847
PS4					0.847
PS5					0.865
PS6					0.789
PS7					0.787