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Examining Entrepreneurial Intentions among Hospitality Students: The Moderating Effect of Years of Study

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ABSTRACT

This study examines the determinants of entrepreneurial intentions among hospitality students, focusing on the roles of entrepreneurial attitude, education, self-efficacy, and the moderating effect of years of study. Using a quantitative approach with 167 respondents analysed via PLS-SEM, the results reveal that entrepreneurial education ($\beta = 0.427$, $p < 0.01$), self-efficacy ($\beta = 0.210$, $p < 0.01$), and attitude ($\beta = 0.200$, $p < 0.05$) significantly predict entrepreneurial intentions, explaining 55.9% of the variance ($R^2 = 0.559$). Contrary to expectations, years of study did not moderate these relationships (all $p > 0.05$), suggesting that academic progression alone does not enhance entrepreneurial intentions without targeted curricular interventions. These findings highlight the importance of integrating experiential learning and sustained entrepreneurial training across all academic levels in hospitality programs. The study contributes to the literature by validating key predictors of entrepreneurial intentions while challenging assumptions about the automatic benefits of prolonged education. Practical implications for curriculum design and future research directions are discussed.

1. Introduction

Entrepreneurship is widely recognized as a key driver of economic growth, regional development, and employment generation [25]. Within the hospitality and tourism sector, entrepreneurship enables graduates to apply their industry-specific skills to establish innovative ventures, contributing to local economic resilience and tourism diversification [37]. In emerging tourism economies such as Malaysia, fostering entrepreneurship among hospitality students is particularly important for regional development and the creation of place-based employment opportunities.

Despite growing interest in entrepreneurship education, hospitality graduates exhibit lower rates of entrepreneurial activity compared to peers in other fields [54]. This trend prompts further investigation into the spatial, institutional, and socio-cultural factors shaping entrepreneurial

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intentions among hospitality students. Theoretical models such as the Theory of Planned Behaviour [44] and the Entrepreneurial Event Model [7] emphasize the role of attitudes, perceived behavioural control, and contextual influences in shaping entrepreneurial intentions. Within hospitality education, prior studies have examined the impact of self-efficacy, entrepreneurship courses, and industry exposure on students' career aspirations [57]. However, regional and institutional factors such as university location, access to industry networks, and local entrepreneurial ecosystems that been remain underexplored, despite their potential influence on students' entrepreneurial development.

This study is particularly timely in light of the post-pandemic economic restructuring that has affected the hospitality industry globally. Structural disruptions, labour shortages, and shifting consumer behaviours have emphasized the need for adaptability and innovation in hospitality entrepreneurship [15]. At the same time, the growing focus on sustainable tourism and digital transformation has opened new entrepreneurial opportunities for graduates [42]. In this evolving landscape, understanding how educational exposure been measured through students' years of study and how it interacts with entrepreneurial factors is essential to informing curriculum design and institutional support strategies.

Three key challenges hinder the development of entrepreneurial intentions among hospitality students. First, limited access to capital presents a significant barrier. High start-up costs and financial risks characterize the hospitality sector, yet students often lack access to funding sources, making it difficult to pursue viable business ideas [41]. Second, many hospitality students face a gap in entrepreneurial competency. Skills such as strategic thinking, innovation, and leadership are crucial, but often underdeveloped due to insufficient training and practical exposure in hospitality programs [17]. Lastly, emotional maturity that encompassing self-awareness, resilience, and emotional regulation is often overlooked. The psychological demands of entrepreneurship can deter students lacking the emotional readiness to manage uncertainty and stress [14].

Although these issues have been studied in broader entrepreneurship research, there is a clear lack of focus on hospitality-specific contexts. Most existing studies fail to address how financial constraints, competency development, and emotional preparedness specifically impact entrepreneurial intentions among hospitality students in Malaysia. Moreover, few have examined how educational progression (e.g., years of study) moderates these relationships. Therefore, this study addresses these research gaps by investigating the influence of capital accessibility, entrepreneurial competency, and emotional maturity on the entrepreneurial intentions of hospitality students, with a focus on how these relationships vary based on students' academic progression. The findings aim to inform higher education policy, improve curriculum design, and support the development of entrepreneurial ecosystems aligned with local tourism strategies.

2. Literature Review

2.1 Entrepreneurial Program

The hospitality industry has long been a vital contributor to economic development and employment generation. In recent years, entrepreneurship within this sector has gained prominence due to its potential for innovation, diversification, and business creation [40]. The past study that focuses on factors influencing entrepreneurial intentions among hospitality students in Haryana, India. The finding been motivated by the growing influx of hospitality graduates entering the labour market annually, it underscores the need for academic institutions to realign curricula with market demands. The findings suggest that both "push" and "pull" factors shape students' entrepreneurial

aspirations, and quality entrepreneurship education could further encourage business ventures in this field [35].

Historically, entrepreneurship in hospitality dates to ancient times, when individual innkeepers and restaurateurs provided lodging and food to travellers. The 19th century marked a turning point with the establishment of modern luxury hotels such as the Savoy in London (1889) and the Ritz in Paris (1898), introducing innovations like electric lighting and en-suite bathrooms [28]. Entrepreneurs such as Richard D'Oyly Carte and César Ritz revolutionized hospitality by setting new standards in service and sophistication. The 20th century witnessed the rise of global hotel chains, beginning with Conrad Hilton's first hotel in 1919 and J.W. Marriott's business expansion from a root beer stand in 1927. These brands pioneered standardization, consistency, and international reach [23]. Post-World War II developments, including franchising models by Holiday Inn and Howard Johnson, further accelerated growth and accessibility [26]. In the latter half of the century, niche markets such as boutique hotels and eco-tourism emerged, driven by entrepreneurs like Ian Schrager and Steve Rubell, who launched Morgans Hotel in 1984. These developments reflected a shift towards personalization and sustainability [56]. The 21st century has been defined by digital transformation. Online booking platforms, review websites, and the sharing economy exemplified by Airbnb that have redefined service delivery and consumer interaction [51]. The COVID-19 pandemic further pushed innovation, prompting businesses to adopt digital solutions, contactless services, and health-conscious practices.

Despite economic disruptions, entrepreneurial dynamism in hospitality persists, with a growing emphasis on technology, wellness, and sustainability. These trends signal a continued evolution of the industry, underscoring the importance of adaptive education and innovative leadership in shaping its future.

2.2 Entrepreneur Program at UiTM

Entrepreneurship education at universities plays a crucial role in cultivating entrepreneurial skills and intentions among students, thereby supporting economic development and employment creation. This synthesis explores the influence of such programs at Universiti Teknologi MARA (UiTM), focusing on their effectiveness in shaping students' entrepreneurial competencies and intentions. Empirical studies have consistently shown that entrepreneurship education enhances students' readiness to launch businesses and develop entrepreneurial competencies [36].

At UiTM, key determinants of entrepreneurial intention include student attitudes and perceived behavioural control, with entrepreneurship education acting as a partial mediator [31]. Attitude emerges as the most influential factor, while self-efficacy plays a moderate role [21]. Notably, the direct impact of entrepreneurship education on intentions is limited, yet its mediating effect underscores its relevance in shaping mindset and behaviour [39].

Environmental elements, such as opportunity recognition and perceived social value, also significantly influence entrepreneurial intentions among UiTM hospitality students [12]. However, challenges persist students report barriers including limited experience, difficulties in finding suitable partners, and insufficient information, particularly in entrepreneurship [3]. Beyond intentions, entrepreneurship education also contributes to improved business performance among UiTM graduates, influenced by curriculum content, relational dynamics, and broader societal support.

In sum, UiTM's entrepreneurship programs foster a supportive environment for entrepreneurial development by enhancing attitudes, competencies, and environmental awareness. Addressing structural challenges will be key to further empowering students and strengthening their entrepreneurial trajectories.

2.3 Entrepreneurial Education and Entrepreneurial Intention

Entrepreneurship education is widely acknowledged as a critical driver of entrepreneurial attitudes, particularly among potential and nascent entrepreneurs [2]. Educational initiatives have proven effective in expanding the pool of individuals interested in entrepreneurship and encouraging those in the early stages of venture creation [34]. Entrepreneurial intention act as the dependent variable in this context can be refers to an individual's willingness to start a business. This intention is shaped by a range of factors, including entrepreneurship education, personal attitudes, perceived behavioural control, and prevailing social norms [43]. A growing body of empirical research affirms a significant positive relationship between entrepreneurship education and entrepreneurial intentions [53]. These findings are further supported by studies demonstrating how exposure to entrepreneurship education enhances university students' inclination toward business creation by [32].

H1: There is a significant relationship between entrepreneurial education and entrepreneurial intention.

2.4 Entrepreneurial Self-Efficacy and Entrepreneurial Intention

Entrepreneurial self-efficacy refers to an individual's confidence in their capability to initiate and manage a business venture. This construct is shaped by factors such as entrepreneurship education, personal attitudes, perceived behavioural control, and social norms [8]. Closely linked to this is entrepreneurial intention as the dependent variable, which denotes an individual's willingness to engage in entrepreneurial activity. A substantial body of research indicates a significant positive relationship between entrepreneurial self-efficacy and entrepreneurial intention [55]. Empirical studies confirm that individuals with higher entrepreneurial self-efficacy are more likely to exhibit stronger entrepreneurial intentions, particularly among university students [5]. These findings highlight the importance of fostering self-belief in entrepreneurship education as a mechanism to inspire future entrepreneurs.

H2: There is a significant relationship between entrepreneurial self-efficacy and entrepreneurial intention.

2.5 Entrepreneurial Attitude and Entrepreneurial Intention

Entrepreneurial attitude encompasses an individual's willingness to take risks, embrace innovation, and maintain a positive orientation toward entrepreneurial activity. This attitude is shaped by personal beliefs, perceived behavioural control, and social norms [48]. Entrepreneurial intention as the dependent variable can be referred to the individual's readiness to establish a business and is similarly influenced by these underlying factors. Empirical research supports a significant positive relationship between entrepreneurial attitude and entrepreneurial intention [22]. Individuals who hold a favourable view of entrepreneurship are more inclined to pursue entrepreneurial ventures, suggesting that fostering such attitudes is essential in promoting entrepreneurial behaviour [48].

H3: There is a significant relationship between entrepreneurial attitude and entrepreneurial intention.

2.6 Years of Study Moderate the Relationship towards Entrepreneurial Intention

Years of study may significantly moderate the relationship between entrepreneurial attitude, entrepreneurial self-efficacy, and entrepreneurship education on students' entrepreneurial intentions. As students advance in their academic journey, they are likely to acquire more knowledge, practical exposure, and self-confidence, which can enhance the strength of these relationships. Several studies suggest that students in higher years of study exhibit stronger entrepreneurial intentions due to increased awareness of business opportunities, better-developed cognitive skills, and greater confidence in applying entrepreneurial competencies [22]. Entrepreneurial attitude, when combined with years of study, may have a compounded effect, as prolonged academic engagement often cultivates a more positive and informed view of entrepreneurship [49]. Similarly, entrepreneurial self-efficacy tends to grow over time through accumulated learning and classroom experiences, enabling students in later years to better visualize and pursue entrepreneurial paths [6]. Furthermore, the impact of entrepreneurship education is likely to be more pronounced among senior students, who are better able to contextualize and apply entrepreneurial concepts and are more attuned to real-world business challenges [3]. Therefore, years of study can act as a critical moderator by influencing the degree to which entrepreneurial mindset and education translate into intention. This highlights the importance of curriculum continuity and the timing of educational interventions to maximize their impact on entrepreneurial development.

H4: Years of study moderate the relationship between Entrepreneurial Attitudes, Self-Efficiency and Education towards Entrepreneurial Intentions

2.7 Research Framework

Thus, from the above discussion, the conceptual model that integrates Entrepreneurial Attitudes, Entrepreneurial Self-efficacy, Entrepreneurial Educations and evaluation of their direct effects on Entrepreneurial Intentions. Additionally, it investigates the moderating role of years of study among students towards relationship. Furthermore, the table oh hypothesis also will be present below.

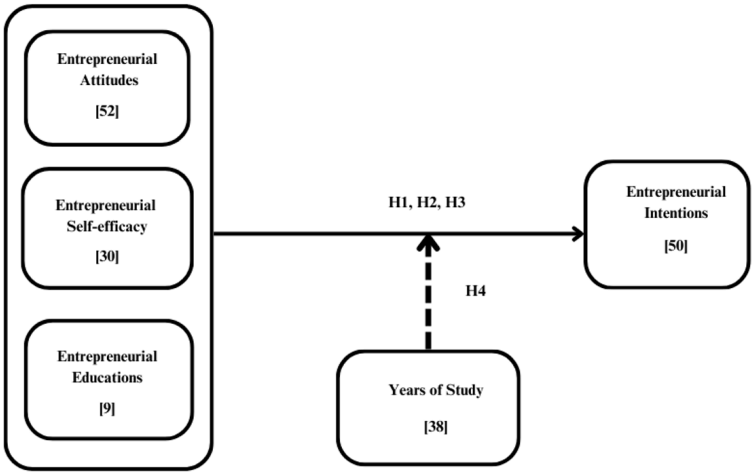

Fig. 1 Research framework

Table 1
Hypothesis table

H1	There is a significant relationship between entrepreneurial attitude and entrepreneurial intention.
H2	There is a significant relationship between entrepreneurial education and entrepreneurial intention.
H3	There is a significant relationship between entrepreneurial self-efficacy and entrepreneurial intention.
H4	Years of study moderate the relationship between Entrepreneurial Attitudes, Self-Efficiency and Education towards Entrepreneurial Intentions

3. Methodology

This research adopted a quantitative methodology, which enables the systematic collection of data from a large number of respondents and is particularly suitable for examining attitudes, experiences, and demographic trends. Grounded in hypothesis testing, the quantitative approach emphasizes empirical analysis through quantifiable data. The study took a descriptive form, allowing for the structured examination of patterns and relationships among variables to enhance understanding of their interactions. Data were gathered using online surveys and standardized questionnaires, conducted in a natural setting with minimal researcher involvement. Given that data collection occurred at a single point in time, a cross-sectional research design was employed, with individual respondents serving as the unit of analysis. According to Ghanad [16], quantitative methods are effective in obtaining factual, generalizable results through statistical analysis, making them ideal for studies aimed at identifying variable relationships.

The research was carried out at Universiti Teknologi MARA (UiTM) Puncak Alam, Malaysia. This location was chosen because of its dense student population, aligning with the study's primary focus on student behaviour related to entrepreneurial intention. Moreover, university students are often considered an appropriate target group for research involving consumer behaviour, decision-making, and technology adoption, making them a relevant population for this study. A non-probability convenience sampling technique was employed due to limitations in time, accessibility, and financial resources. This approach is particularly suitable when a complete sampling frame is unavailable and swift data collection is necessary. Based on G*Power analysis, a minimum sample size of 119 respondents was identified as sufficient. Ultimately, 167 valid responses were obtained, exceeding the required threshold for conducting Partial Least Squares Structural Equation Modelling (PLS-SEM). The final sample size was considered adequate to ensure the reliability and validity of the statistical analysis.

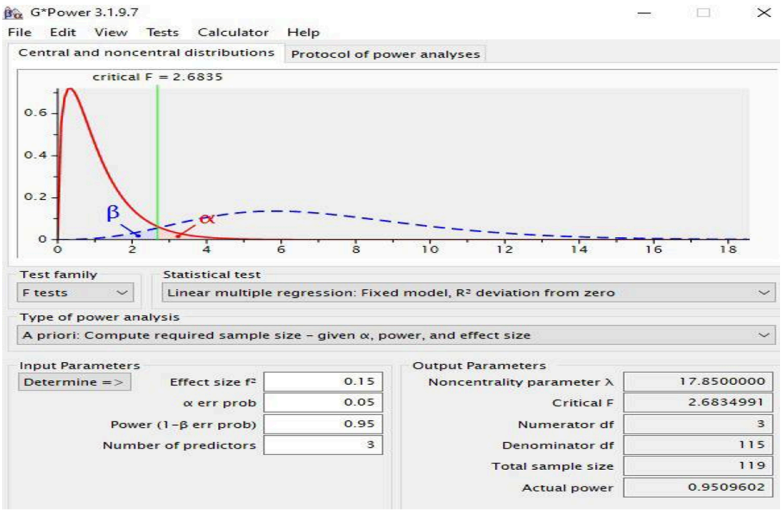

Fig. 2. Sample size calculation using G*Power

The study's instrument comprises five sections, with all constructs measured on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree), except for general questions formatted as Yes/No. Section A collects demographic data (gender, age, years of study, and current business involvement), developed by the researchers. All of the other sections within the construct were adapted and adopted by prior study as mentioned in Table 2.

Table 2
Instrumentation of the study

Section	Variable	Item	Source
A	Demographic background	4	Researcher
B	Entrepreneurial Education	8	[48]
C	Entrepreneurial Self-Efficacy	8	[13]
D	Entrepreneurial Attitude	5	[29]
E	Entrepreneurial Intention	9	[33]

Table 2 Indicate the instrumentation that been used

The research instrument was tested for reliability using Cronbach's Alpha, and all constructs exceeded the acceptable threshold of 0.70. As been stated by [47] the most appropriate alpha value for this investigation was considered to fall between .70 and .90. Additionally, construct validity was assessed through convergent validity and discriminant validity using SmartPLS 4.1.0, ensuring the soundness of the measurement model [19]. Data were analysed using SPSS for descriptive statistics and PLS-SEM for model testing. The analysis involved two stages. First, measurement Model Assessment (indicator reliability, AVE, CR, HTMT). Second, structural Model Assessment (path coefficients, R^2 values, moderating effects) to assessed first and second research objectives.

Table 3
Instrumentation of the study

Questionnaire	Items	Cronbach's Alpha
Section B: Entrepreneurial Education	8	.764
Section C: Entrepreneurial Self-Efficacy	6	.879
Section D: Entrepreneurial Attitude	5	.828
Section E: Entrepreneurial Intention	9	.949

Table 3 shows reliability coefficients for each section of the questionnaire

4. Result

This study investigates factors influencing entrepreneurial intentions among UiTM Puncak Alam students. A survey of 167 respondents revealed that 73.1% were female, while 26.9% were male. The majority (51.5%) were aged 22 years or younger, followed by 23 (18.6%), 24 (13.2%), and 25+ years (16.8%). Third-year students constituted the largest group (35.9%), with 19.2% currently running a business. Findings suggest varying entrepreneurial engagement across demographics, providing insights for academic and industry stakeholders.

Table 4
Demographics profile

Variable	Categories	Frequency	Percent (%)
Gender	Male	45	26.9
	Female	122	73.1
Age	22 years old and below	86	51.5
	23 years old	31	18.6
	24 years old	22	13.2
	25 years old and above	28	16.8
Years of study	First year	57	34.1
	Second year	50	29.9
	Third year	60	35.9
Currently running a business	Yes	32	19.2
	No	135	80.8

Table 4 show demographics profile of respondents UiTM Puncak Alam Students

4.1 Construct Reliability and Validity

The assessment follows the criteria of [11] to ensure reliability and validity. Indicators should load strongly (>0.70) on their latent constructs, while loadings below 0.40 must be discarded [11]. Loadings between 0.40 and 0.70 may be retained, particularly in social sciences, contingent on the average variance extracted (AVE) [10]. Out of 21 indicators, one item (Ent_A4, loading = 0.110) was removed for falling below the 0.40 threshold. Four additional items (Ent_E2, Ent_E5, Ent_E6, Ent_E8) were excluded due to loadings between 0.40–0.70 and an AVE below 0.50. One item (Ent_S1, loading = 0.669) was retained as the AVE remained above 0.50.

All constructs demonstrated acceptable reliability, with Cronbach's alpha values exceeding 0.7, except for Entrepreneurial Education ($\alpha = 0.694$). This slightly lower value can be attributed to the limited number of items (four) in the construct after item been deleted to obtain reliable AVE value, as Cronbach's alpha tends to underestimate reliability with fewer indicators [24]. However, the construct's composite reliability (rho_c = 0.815) and AVE (0.527) exceeded thresholds (rho_c > 0.7, AVE > 0.5), confirming internal consistency and convergent validity [19,45].

Recent literature highlights that Cronbach's alpha, while widely used, has limitations due to its dependence on item count and tau-equivalence assumptions [11]. As such, composite reliability (CR) and average variance extracted (AVE) are now preferred for assessing construct validity [1]. Although the Entrepreneurial Education construct had a marginally lower Cronbach's alpha ($\alpha = 0.694$), its strong composite reliability (CR = 0.815) and AVE (0.527) confirm adequate reliability and convergent validity, supporting its inclusion in further analysis. Full metrics are presented in Table 5.

Table 5
Item loadings, reliability and convergent validity

	λ	α	CR (rho_c)	AVE
Entrepreneurial Attitude		0.830	0.886	0.661
Ent_A1	0.869			
Ent_A2	0.815			
Ent_A3	0.769			
Ent_A5	0.798			
Entrepreneurial Education		0.694	0.815	0.527
Ent_E1	0.799			
Ent_E3	0.785			
Ent_E4	0.721			
Ent_E7	0.579			
Entrepreneurial Self-Efficiency		0.808	0.909	0.627
Ent_S1	0.669			
Ent_S2	0.717			
Ent_S3	0.813			
Ent_S4	0.842			
Ent_S5	0.856			
Ent_S6	0.836			
Entrepreneurial Intentions		0.949	0.957	0.712
Ent_I1	0.799			
Ent_I2	0.777			
Ent_I3	0.816			
Ent_I4	0.781			
Ent_I5	0.875			
Ent_I6	0.860			
Ent_I7	0.909			
Ent_I8	0.883			
Ent_I9	0.884			
Years of Study				
YoS	1.0			

Notes: This table displays the measurement model test that was performed in the initial stage. Most of the results are compatible with the rule of thumb proposed by [11]. The measurement checks show all the variable loadings, alpha coefficient, composite reliability (CR), as well as average variance (AVE) respectively.

4.1.1 Discriminant Validity (HTMT)

Table 6 presents the Heterotrait-Monotrait (HTMT) ratio results, which evaluate discriminant validity by ensuring constructs measure distinct concepts [11]. Values approaching 1 indicate overlapping constructs [46], while significantly lower values confirm distinctiveness. Following established thresholds, HTMT < 0.85 was applied for conceptually distinct constructs, and HTMT ≤ 0.90 for conceptually similar ones [11]. The results confirm robust discriminant validity, supporting the model's integrity.

The HTMT ratio results presented in Table 6 demonstrate adequate discriminant validity among the study's constructs. While the entrepreneurial attitude, education, and self-efficacy constructs show moderately high correlations (ranging from 0.741 to 0.829), these values remain below the

recommended 0.85 threshold, confirming they represent distinct yet related dimensions of entrepreneurship. Entrepreneurial intention maintains appropriate discriminant validity with correlations between 0.689 and 0.757. Notably, the interaction terms exhibit acceptable distinctiveness (ranging from 0.580 to 0.739), despite their inherent interrelated nature as multiplicative constructs. The control variable 'Years' shows negligible correlations with core constructs (0.048-0.136), verifying its independence. These results collectively support the measurement model's validity, with all HTMT values complying with the conservative 0.85 cutoff, thereby ensuring each construct captures unique variance while maintaining expected theoretical relationships.

Table 6
HTMT results

	Ent_Attitude	Ent_Education	Ent_Self-efficiency	Ent_intention	Years	Years x Ent_Attitude	Years x Ent_Self-efficiency	Years x Ent_Education
Ent_Attitude								
Ent_Education	0.741							
Ent_Self-efficiency	0.801	0.829						
Ent_intention	0.689	0.733	0.757					
Years	0.075	0.136	0.048	0.055				
Years x Ent_Attitude	0.233	0.337	0.233	0.203	0.017			
Years x Ent_Self-efficiency	0.230	0.210	0.218	0.193	0.041	0.739		
Years x Ent_Education	0.298	0.178	0.188	0.117	0.060	0.580	0.655	

Notes: This table displays the results of the HTMT test. This test is mostly used to assess discriminant validity within the model. The general rule of practice for this test bases itself on [46] and [11].

4.2 Assessment within Structural Model

The coefficient of determination (R^2) assesses the structural model's quality by indicating the proportion of variance in the dependent variable explained by the predictors [4]. In this study, the R^2 value of 0.559 suggests that 55.9% of the variance in Entrepreneurial Intention is explained by Entrepreneurial Attitude, Entrepreneurial Education, and Entrepreneurial Self-Efficacy (Table 7). To further evaluate statistical significance, path coefficients were analysed using bootstrapping with 10,000 subsamples. A large number of subsamples enhances the stability and precision of estimates [27], while also yielding narrower and more consistent confidence intervals, particularly beneficial for studies with smaller sample sizes [18].

All hypothesized relationships were supported. Entrepreneurial education exhibited the strongest influence on entrepreneurial intention ($\beta = 0.427$, $t = 3.180$, $p = 0.001$), followed by entrepreneurial self-efficacy ($\beta = 0.210$, $t = 5.201$, $p = 0.001$) and entrepreneurial attitude ($\beta = 0.200$, $t = 2.222$, $p = 0.026$). These results confirm that individuals who possess favourable attitudes toward entrepreneurship, receive entrepreneurial education, and have higher self-efficacy are significantly more likely to develop entrepreneurial intentions. The findings underscore the importance of both psychological factors (attitude and self-efficacy) and educational interventions in fostering entrepreneurial aspirations.

Table 6
Result of the structural model path coefficient (direct relationship)

Hypotheses	Relationship	B (slope)	SD	t-Value	P values	Decision
H1	**Ent_A → Ent_I**	0.200	0.095	2.222*****	0.026	Accepted
H2	**Ent_E → Ent_I**	0.427	0.063	3.180*	0.001	Accepted
H3	**Ent_S → Ent_I**	0.210	0.082	5.201*****	0.001 >	Accepted

Notes: This table shows the results of the structural model using PLS version 4. The R^2 value is 0.559 and the sample size is 167. The signs ***** denote significance at 5% of confident interval, respectively.
Ent_A, Entrepreneurial Attitude; **Ent_E, Entrepreneurial Education; Ent_S, Entrepreneurial Self-Efficiency; **Ent_I**, Entrepreneurial Intention.

4.3 Moderation Analysis

To assess the moderating role of Years of Study on the relationships between Entrepreneurial Attitude, Education, Self-Efficacy, and Entrepreneurial Intention. The study analysed path coefficients, p-values, and effect sizes (f^2). Following [20], this study applied revised f^2 thresholds (small = 0.005, medium = 0.02, large = 0.035), which are more suitable for PLS-SEM in social and behavioural research, particularly with smaller samples (N = 167). These updated criteria account for the exploratory nature of such studies, where even small effects may hold practical significance. Cohen's (1988) traditional benchmarks (0.02, 0.15, 0.35) risk underestimating meaningful relationships in limited samples or complex models, making the adjusted thresholds more appropriate for interpretation.

The analysis of H4 revealed no statistically significant moderating effects of Years of Study at the conventional $p < 0.05$ threshold. The interaction between Years of Study and Entrepreneurial Attitude showed a negligible effect ($\beta = -0.005$, $p = 0.953$, $f^2 = 0.000$), indicating no meaningful moderation. Similarly, the interaction with Entrepreneurial Education, while demonstrating a medium effect size ($f^2 = 0.012$), was non-significant ($\beta = 0.087$, $p = 0.296$). The most notable result emerged for Entrepreneurial Self-Efficacy, which approached marginal significance ($\beta = -0.096$, $p = 0.076$) with a small effect size ($f^2 = 0.007$), tentatively suggesting that the positive relationship between self-efficacy and entrepreneurial intentions might weaken slightly with additional years of study. However, given that all effects failed to reach standard significance levels and exhibited small-to-medium practical effect sizes (per Hair et al.'s 2016 revised thresholds), this study conclude that Years of Study does not serve as a substantively meaningful moderator in this model. The marginally significant self-efficacy finding may warrant further investigation in larger samples but should be interpreted with caution in the current study. As all there indicator Entrepreneurial Attitude, Entrepreneurial Education and Entrepreneurial Self-Efficiency still remain significant positive either with moderation effect and without moderations effect has been illustrated in Figure 3 and Figure 4.

Furthermore, since all moderations hypothesized had been rejected, there is no further simple slope analysis to demonstrate the degree of the moderation effect strength in figure. On Figure 3 and Figure 4 illustrates the structural model with and without moderation effect.

Table 7
Moderation analysis result

		B (slope) (P-Value)	t-Value	f^2 (Effect Size)	Effect Strength	Decision
H4	**Years x Ent_A > Ent_I**	-0.005 (0.953)	0.059	0.000	Small	Rejected
	Years x Ent_E > Ent_I	0.087 (0.296)	1.773*	0.012	Medium	Rejected
	Years x Ent_S > Ent_I	-0.096 (0.076)	1.045	0.007	Small	Rejected

Notes: The signs * denote significance at 5% of confident interval, respectively

Ent_A, Entrepreneurial Attitude; **Ent_E, Entrepreneurial Education; Ent_S, Entrepreneurial Self-Efficiency; **Ent_I,** Entrepreneurial Intention.
**The f^2values in this study are 0.005, 0.02, and 0.035 were used to define small, medium, and large effects, respectively.

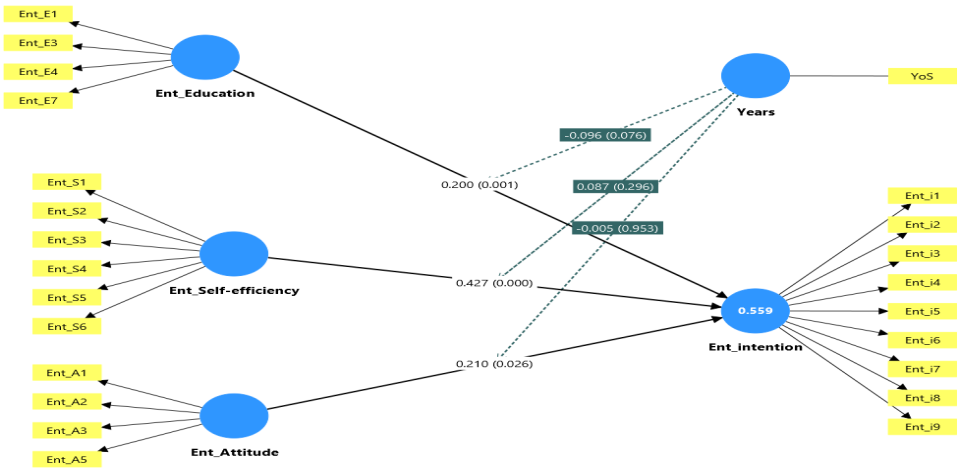

Fig. 3. Illustrated the structural model of path coefficients

Notes: The values that been showed in the figures path coefficients (P-Value) and R^2. The figure showed the value if moderation effect been applied.

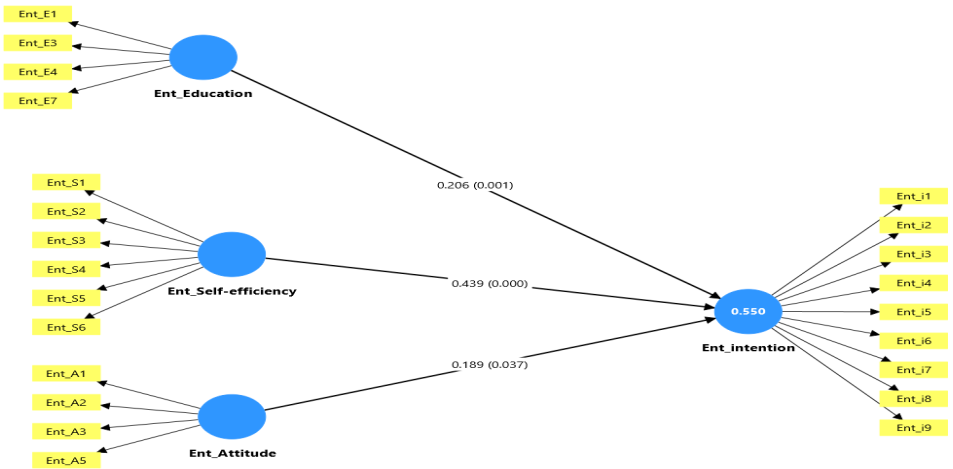

Fig. 4. Illustrated the structural model of path coefficients

Notes: The values that been showed in the figures path coefficients (P-Value) and R^2. The figure showed the value if moderation effect not been applied.

All three hypotheses (H1, H2, H3) are being supported, meanwhile H4 been rejected.

4.4 Results and Hypotheses Summary

Table 8
Summary of hypotheses testing

Hypothesis(s)		Result
H1	There is a significant relationship between entrepreneurial attitude and entrepreneurial intention.	ACCEPTED
H2	There is a significant relationship between entrepreneurial education and entrepreneurial intention.	ACCEPTED
H3	There is a significant relationship between entrepreneurial self-efficacy and entrepreneurial intention.	ACCEPTED
H4	Years of study moderate the relationship between Entrepreneurial Attitudes, Self-Efficiency and Education towards Entrepreneurial Intentions	REJECTED

Table 9
Summary of research objectives

RO1	To examine the relationship between Entrepreneurial Attitude, Entrepreneurial Education, Entrepreneurial Self-Efficiency towards Entrepreneurial Intentions among students	Entrepreneurial Attitude	Significant Positive
		Entrepreneurial Education	Significant Positive
		Entrepreneurial Self-Efficiency	Significant Positive
RO3	To investigate the moderating effect of Years of Study on the relationships Entrepreneurial Attitude, Entrepreneurial Education, Entrepreneurial Self-Efficiency towards Entrepreneurial Intentions among students	Years x Ent_A > Ent_I	Significantly Negative Moderation Effect
		Years x Ent_E > Ent_I	Insignificant Negative Moderation Effect
		Years x Ent_S > Ent_I	Significantly Positive Moderation Effect

Notes: **Ent_A, Entrepreneurial Attitude; **Ent_E**, Entrepreneurial Education; Ent_S, Entrepreneurial Self-Efficiency; **Ent_I**, Entrepreneurial Intention.

5. Discussion

The findings of this study both align with and diverge from previous research in important ways. The significant positive relationships between entrepreneurial attitude, education, self-efficacy and intentions (H1-H3) strongly support established theories like the Theory of Planned Behaviour and prior empirical work [22,48], confirming these as universal drivers of entrepreneurial intentions across different student populations. However, the failure to find significant moderating effects of years of study (H4) contrasts with literature suggesting academic progression strengthens these relationships [3,49]. This divergence may reflect unique aspects of the UiTM hospitality program context, such as curriculum design that front-loads key entrepreneurial content or insufficient advanced-year experiential learning opportunities. The marginally significant weakening effect of years of study on the self-efficacy-intention relationship (β = -0.096, p = 0.076) is particularly noteworthy, potentially indicating diminishing returns of classroom-based entrepreneurship

education over time without complementary practical experiences. These results suggest that while core psychological and educational factors consistently influence intentions, institutional and program-specific factors may substantially alter how academic progression impacts these relationships. The study highlights the need for context-sensitive approaches in entrepreneurship education, particularly in hospitality programs where industry-specific challenges may require tailored interventions at different academic stages. Future research should explore these moderation effects through longitudinal designs and mixed methods to better understand the complex interplay between academic progression and entrepreneurial development in specialized fields like hospitality management.

6. Conclusion

This study confirms that entrepreneurial attitude, education, and self-efficacy significantly predict entrepreneurial intentions among hospitality students, with education showing the strongest influence. However, years of study did not moderate these relationships as hypothesized, suggesting academic progression alone may not enhance entrepreneurial intentions without targeted interventions. The findings highlight the need for experiential learning components in advanced curricula to sustain student engagement. For educators and policymakers, these results emphasize that structured entrepreneurship programs should combine foundational coursework with practical applications across all academic levels. This research contributes to understanding how hospitality education can effectively foster entrepreneurial mindsets, while calling for further investigation into curriculum design and longitudinal development of entrepreneurial competencies.

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