

Extending the theory of planned behavior to explain halal entrepreneurial intention: evidence from SEM-PLS analysis

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Abstract

This study examines the factors influencing students' intentions to start a halal business at Perguruan Tinggi Keagamaan Islam Negeri (PTKIN) in Indonesia. It extends the Theory of Planned Behavior (TPB) by incorporating halal industry knowledge and awareness as additional determinants. Data from a survey of 300 PTKIN students were analyzed using PLS-SEM. The results show that knowledge of and strong awareness of the halal industry greatly and positively influence students' views on starting a business in the halal sector. Moreover, being entrepreneurial, feeling that others approve of entrepreneurship, and believing you can control your actions all had a positive and significant impact on the intention to start a halal business, with the belief in controlling your actions being the strongest influence. Halal entrepreneurial attitudes act as both complete and partial mediators between halal industry knowledge and awareness and the decision to start a business. The unique part of this study is the development of a TPB model grounded in halal values, highlighting the importance of knowledge and awareness of the halal industry in shaping entrepreneurial attitudes. It applies the model nationally within the underexplored PTKIN context and recommends strengthening halal entrepreneurship curricula and institutional support.

Keywords: *theory of planned behavior, knowledge, awareness, entrepreneurial intentions, halal industry.*

Introduction

The global halal industry is now developing as one of the most strategic and competitive economic sectors (Albra et al., 2023). The State of the Global Islamic Economy report shows that the value of global halal consumption has exceeded \$2.4 trillion, including sectors such as food and beverages, Muslim fashion, cosmetics, halal tourism, and Shariah-compliant financial services (Biro Hubungan Masyarakat, 2024). In this context, Indonesia holds a very important position, consistently ranking among the top three in the Global Islamic Economy Indicator (GIEI) (Kemenkeu, 2025). This position shows that Indonesia is not only the largest halal market but also has excellent potential to become a global center for halal production, innovation, and entrepreneurship.

At the national level, the halal industry has grown significantly. By 2025, Indonesia will have created over 140,000 companies in the halal industry, and most of them are in the food and drink sector (Direktorat Perwilayahan Industri, 2025). The halal value chain contributes more than 25% to the country's Gross Domestic Product, underscoring its importance to the economy (Yudha, 2025). Even with strong growth, there are still challenges in developing entrepreneurs with sufficient knowledge, industry understanding, and readiness to participate in the halal business environment.

Higher education is crucial for addressing these challenges (Boucif et al., 2025). PTKIN has a special place in Indonesia's higher education system. They focus on both academic growth and promoting Islamic values in society and the economy, as noted by Zuhri et al. (2025). Indonesia has 59 PTKIN institutions, such as UIN, IAIN, and STAIN, according to Antara News (2025). Besides their academic duties, PTKIN are encouraged to promote halal entrepreneurship by establishing halal centers, running business incubation programs, and supporting halal small and medium enterprises (Firdaus et al., 2025). Even though there is evidence that institutional support does not always lead students to want to become entrepreneurs, research shows that many students tend to choose traditional jobs rather than starting their own businesses (Adelaja et al., 2023; Rizal et al., 2024; Xanthopoulou & Sahinidis, 2024). This suggests that the factors influencing someone's decision to become an entrepreneur warrant further exploration.

In entrepreneurship research, the Theory of Planned Behavior is often used to explain how people decide to start their own businesses. This theory examines three main factors: their personal feelings about starting a business, what others think of it, and how easy they believe it will be to take action (Boucif et al., 2025; Halbusi et al., 2023; Niswa et al., 2026). Many research studies show that these three factors play a big role in shaping students' interest in starting their own businesses (Ha et al., 2025; Tandelilin et al., 2016). Most studies that use real data examine general entrepreneurship contexts, especially in public universities (Costa et al., 2022; Oré, 2023). So, even though TPB has been widely applied and tested across many contexts, its use in value-driven halal entrepreneurship has not been as widely explored.

In the field of halal industry research, past studies have mostly examined consumer behavior (Albra et al., 2023; Baba et al., 2026), the halal certification process (Juma et al., 2025), and halal MSME performance (Niswa et al., 2026). In many cases, the halal aspect is seen as a product feature or regulatory requirement rather than a belief system that influences how businesses are assessed. Some research shows that understanding halal and being aware of it can affect people's opinions and their financial decision-making (Boucif et al., 2025; Juma et al., 2025). However, these ideas are rarely found together with cognitive and value-based beliefs in the belief–attitude–intention model proposed by Ajzen (1991), especially in the institutional setting of PTKIN.

In Islamic higher education, students are deeply influenced by Islamic values and the principles of halal (Hardiana et al., 2023). However, just because someone is exposed to religion does not mean they will take action to start a business. Ajzen (1991) says that beliefs affect intention indirectly by influencing attitudes. So, looking at halal entrepreneurial attitude as something that connects halal industry knowledge, halal industry awareness, and the desire to start a business is based on the original TPB model, not just adding extra or unnecessary steps.

This study does not claim that there is no previous research on TPB. However, it aims to add context by including knowledge about and awareness of the halal industry as belief-based factors that influence attitude, helping to explain the intention of PTKIN students in Indonesia to start halal-related businesses. The TPB posits that a person's decision to act is based on their feelings about the behavior, what they think others believe, and how easy they find it to perform the behavior (Ajzen, 1991). In the area of student entrepreneurship, TPB has been commonly used to explain how entrepreneurial intentions develop, especially

by focusing on attitudes and perceived behavioral control as important factors (Boucif et al., 2025; Ha et al., 2025; Halbusi et al., 2023). In the case of PTKIN, entrepreneurial intentions form within an educational environment grounded in Islamic values and religious morals. Studies have found that educational settings focused on values can affect students' attitudes toward certain topics, their perceptions of others' beliefs, and their sense of their own ability to make financial decisions (Dewi et al., 2026; Fayolle & Liñán, 2014; Nabi et al., 2017).

This study supports the SDGs by including knowledge about the halal industry (Niswa et al., 2026) and awareness of the halal industry (Juma et al., 2025) as factors that align with the institution's mission under PTKIN. Instead of treating these variables as separate additions to TPB, this study views halal industry knowledge as a type of belief-based thinking related to behavior, and halal industry awareness as belief systems based on values, which aligns with Ajzen (1991) original belief-attitude model. Understanding halal rules, getting certified, and understanding market opportunities help people feel more positive about starting a halal business. This is because they see clear benefits and feel their values match what halal businesses offer (Juma et al., 2025; Niswa et al., 2026). At the same time, being aware of halal practices shows that a person takes religious values seriously, which can shape their views and influence what they consider right or normal on campus and in wider society (Albra et al., 2023).

On the other hand, when campuses offer training, support, and links to small businesses, people feel more capable of taking action (Nabi et al., 2017). So, TPB is the main theory used here, and knowledge of and awareness of the halal industry serve as beliefs that indirectly influence attitudes, which aligns with Ajzen (1991) explanation of the mediating process. This method offers a better understanding of why PTKIN students intend to become halal entrepreneurs while preserving the original TPB framework.

Understanding the halal industry includes knowledge of sharia principles, the halal certification process, and business opportunities in the halal economy. Within the TPB framework, knowledge is a cognitive belief that shapes individual evaluations and influences attitudes toward a behavior (Supaat et al., 2019). Individuals with halal knowledge tend to have more positive attitudes toward halal-based activities. Previous research has shown that halal knowledge influences individual attitudes toward halal products and activities (Kurniawati et al., 2023). Other research has also found that knowledge of halal products can increase positive attitudes toward halal food (Lazuardy & Hidayat, 2025). Furthermore, product knowledge also shapes attitudes toward halal-based decisions (Fauziah & Amin, 2021). Therefore, the greater an individual's knowledge of the halal industry, the more positive their attitude toward halal entrepreneurship.

H1: Knowledge of the halal industry has a positive effect on halal entrepreneurial attitude

Halal awareness reflects the level of consumer understanding and knowledge regarding the concept and importance of a product's halal status (Garofit et al., 2023). From a consumer behavior perspective, knowledge and awareness of a product's attributes can shape consumers' evaluations and attitudes toward it. Based on the TPB concept, attitudes are formed from the beliefs and information an individual has about an object. Therefore, the higher the level of consumer awareness of a product's halal status, the more likely the consumer is to form a positive attitude toward halal products. Empirical findings also

support this relationship, with research by Handriana et al. (2020) showing that halal awareness positively affects consumer attitudes toward halal cosmetic products, and by Aziz et al. (2023), which found that attributes of halal awareness increase consumers' positive attitudes toward halal products.

H2: Halal industry awareness has a positive effect on halal entrepreneurship attitudes

People's feelings about starting a business are an important part of TPB. This theory has repeatedly shown that these feelings can affect someone's decision to become an entrepreneur (Halbusi et al., 2023). In many cases, having a positive outlook toward starting a business increases the likelihood that someone will actually begin one (Ha et al., 2025; Mahfud et al., 2020). Research by Anwari & Hati (2020) shows that a positive attitude towards halal business opportunities encourages individuals to become halalpreneurs. Iskandar et al. (2026) also found that entrepreneurial attitudes positively influence the intention to become a halal entrepreneur.

H3: Halal entrepreneurship attitude has a positive effect on entrepreneurial intentions in the halal industry

Subjective norms describe an individual's perception of social pressure or influence from those around them, such as family, educational institutions, and society (Widjaja et al., 2020). From the Theory of Planned Behavior, social norms can influence a person's intention to engage in a behavior, including starting a business. Research shows that subjective norms can increase a person's intention to become an entrepreneur (Baba et al., 2026; Halbusi et al., 2023). In the halal context, Mizana & Albari (2024) also found that subjective norms positively influence an individual's intention to engage in halal-related activities.

H4: Subjective norms have a positive effect on entrepreneurial intentions in the halal industry

Perceived behavior control is about how ready a business feels mentally to take action. Controlled behavior is about how much someone believes they can do something and whether they have the tools or support to do it (Ha et al., 2025; Oré, 2023). From the TPB perspective, the greater an individual's perceived control, the stronger their intention to act, including starting a business. In the halal industry, things like getting training, support for starting a business, and connecting with others can help a person feel more in charge of their actions. Research shows that when people feel they have control over their actions, they are more likely to start a business (Costa et al., 2022; Liao et al., 2022; Niswa et al., 2026). Bahjam et al. (2022) show that perceived behavioral control positively influences an individual's intention to engage in halal-related activities.

H5: Perceived behavioral control has a positive effect on entrepreneurial intentions in the halal industry

Besides directly affecting entrepreneurial intentions, research in business shows that knowledge can also shape these intentions indirectly by influencing attitudes. Research using bibliometric and meta-analytical approaches finds that knowledge shapes attitudes, which in turn influence a person's desire to start a business (Liao et al., 2022; Nájera et al., 2023). Some research has also found that attitudes play a role in connecting knowledge with

the decision to start a business (Hussain et al., 2021). So, people's attitudes are likely to act as a bridge between their knowledge about the halal industry and their decision to start a halal-related business.

H6: Halal entrepreneurship attitudes mediate between knowledge and entrepreneurial intentions in the halal industry

Knowing about the halal industry can directly affect people's views and plans, and can also indirectly influence their desire to start a business through their attitudes. Studies have found that individuals who are more aware tend to have stronger feelings and plans to start their own business (Mawardi et al., 2022; Supaat et al., 2019). This means that the way someone feels about something, or their attitude, plays a key role in how awareness of halal entrepreneurship affects their desire to get involved.

H7: Halal entrepreneurial attitudes mediate between awareness and entrepreneurial intentions in the halal industry

Methods

This research was conducted with students from PTKIN in Indonesia, using a descriptive-quantitative approach. The research population comprises active students from PTKIN in Indonesia, including UIN, IAIN, and STAIN. Students are selected because they are at the stage of forming career and entrepreneurial intentions, and they are the primary targets of policies aimed at strengthening entrepreneurship (Duong & Tran, 2024; Oré, 2023). Each variable was measured using 3 to 6 indicators, yielding a total of 30 indicators in this study. According to the recommendations of Hair et al. (2017) and Harahap et al. (2023), when conducting Structural Equation Modeling (SEM) analysis with Partial Least Squares (PLS), the minimum recommended sample size should be between 5 and 10 times the number of indicators. The study used the suggested maximum level ($\times 10$) to improve the model's reliability, resulting in a minimum required sample size of 300.

The method used to select participants was purposive sampling, and the criteria for choosing respondents were: (1) students who are actively involved in PTKIN, (2) students who have studied for at least one year, and (3) students who have some basic knowledge or interest in entrepreneurship and the halal industry. Before distributing the main questionnaire, a test was conducted with 30 PTKIN students. An item is worth using if it is both valid and reliable. The questionnaire was shared online via Google Forms and spread through academic groups and social media sites used by students from PTKIN schools, so people from different areas could take part. The item measurement scale uses a five-point Likert scale, with options from 1 (strongly disagree) to 5 (strongly agree).

This study used Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the hypotheses because it is well-suited for research that predicts outcomes and accounts for several hidden factors and intermediate steps. Data were analyzed using SmartPLS 3.0. The model evaluation was conducted in two parts. They checked the measurement model and analyzed the structural model (Hair et al., 2023). The mediating effect was checked using a bootstrapping method. Mediation effects were considered significant when the indirect effect had a t-value greater than 1.96 and a p-value less than 0.05, according to Hair et al. (2017).

Table 1. Variables, Deficiencies, Indicators, and Research Sources

Variable	Definition	Indicator
Halal Industry Knowledge (Albra et al., 2023; Liao et al., 2022)	The level of individual understanding of the concepts, rules, and characteristics of the halal system and its implications in economic activities.	Basic principles of halal; halal certification; consumer characteristics; market potential
Halal Industry Awareness (Albra et al., 2023; Niswa et al., 2026)	The level of individual awareness of the importance of halal values as religious, ethical, and social guidelines in economic activities.	Halal care; religious values; ethics; compliance; moral responsibility; consistency of behavior
Halal Entrepreneurial Attitude (Juma et al., 2025; Nabi et al., 2017; Riswandi et al., 2023)	Evaluation of individuals who are positive or negative in entrepreneurial activities based on halal values.	Interest; positive outlook; benefits; value conformity; preferences
Subjective Norms (Ajzen, 1991; Hardiana et al., 2023)	An individual's perception of social pressures and the expectations of those who are considered important to a behavior.	Family support; Educational; environment support; Social support
Perceived Behavior Control (Ajzen, 1991; Supaat et al., 2019)	Individual perception of the level of ease or difficulty in carrying out a behavior based on the ability and resources they have.	Confidence; skills; financial resources; access training; institutional support; network access
Entrepreneurial Intention (Baba et al., 2026; Nabi et al., 2017)	The level of readiness, seriousness, and commitment of the individual to carry out entrepreneurial activities.	Desires; planning; seriousness; commitment; readiness to act; career preferences

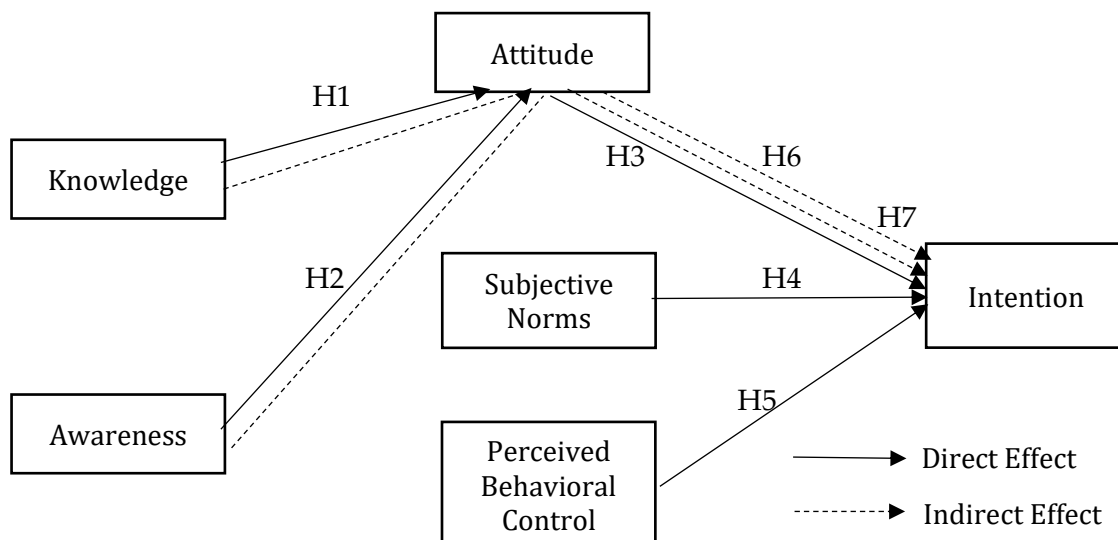


Figure 1. Research Model.

This study uses the TPB by Ajzen (1991) to explain why students at PTKIN have intentions to become entrepreneurs. Attitudes, what people think others might think, and how easy they feel it is to do something all help decide if someone wants to take action. TPB

was selected because it has been shown to effectively explain why people decide to start their own businesses (Boucif et al., 2025; Halbusi et al., 2023). This model is expanded by adding knowledge and awareness of the halal industry as important factors related to the characteristics of PTKIN. Understanding halal helps students think more clearly about business opportunities related to it (Niswa et al., 2026). Being aware of halal also shows that people have truly accepted Islamic values and ethics, which influence how they make economic decisions (Juma et al., 2025).

Result and Discussions

The study examines basic information about the participants to understand the group better. More than half of the people surveyed were women, with 176 women making up 58.67% of the group. The remaining 41.33% of the sample consisted of men. The majority of respondents came from UIN, with 168 individuals (56.00%) responding. After that came IAIN, with 94 respondents (31.33% of the total), and STAIN, with 38 respondents (12.67%). Looking at respondents' origins, the largest group was the Faculty of Islamic Economics and Business, with 105 people, or 35.00% of the total. Other faculties have a more diverse proportion. Most people who took part in the study have come across halal entrepreneurship through training programs, small businesses, academic events, or school activities. This shows that the group studied is a good fit for looking at their interest in starting a halal business.

Table 2. Respondent Data Results

Characteristics		Frequency	Percentage (%)
Gender	Male	124	41.33
	Women	176	58.67
Types of PTKIN	UIN	168	56.00
	IAIN	94	31.33
	STAIN	38	12.67
Faculty	Faculty of Islamic Economics and Business	105	35.00
	Faculty of Sharia and Law	27	9.00
	Faculty of Tarbiyah and Teacher Training	35	11.67
	Faculty of Da'wah and Communication	29	9.67
	Faculty of Ushuluddin and Philosophy	13	4.33
	Faculty of Adab and Humanities	19	6.33
	Faculty of Science and Technology	31	10.33
	Faculty of Psychology/Social Sciences	41	13.67
	Experience in Halal industry activities	Have been involved (training, MSMEs, internships)	122
	Have received a halal industry course	109	36.33
	Have participated in halal curricular activities	57	19.00
	Other similar activities	12	4.00

The study's external measurement model shows how the indicators relate to the underlying concepts in the research model. The researchers used PLS-SEM to assess the quality of the research tools. They assessed the reliability and validity of the concepts using

measures such as Cronbach's alpha, Composite Reliability (CR), and Average Variance Extracted (AVE) (Harahap et al., 2023). The test results indicate that every part of the model is very reliable. Cronbach's alpha is between 0.886 and 0.912, and the Composite Reliability is from 0.910 to 0.926. According to Hair et al. (2023), a reliability score above 0.70 indicates good internal consistency. Therefore, all the constructs used in this study have met the needed reliability requirements.

Convergent validity was assessed using factor loadings and average variance extracted. All indicators showed outer loadings greater than 0.70, indicating that each properly represented the underlying concept. Additionally, the average values across all constructs range from 0.628 to 0.797, which is above the minimum standard of 0.50 suggested by researchers such as Hair et al. (2017). These results show that each concept explains a substantial portion of the variation in its related measures. The overall check of the external measurement model showed that the research tool is trustworthy and accurate, and there were no issues with any of the indicators. Therefore, all the questions in the questionnaire are ready to be used in the next part of the model analysis.

Table 3. Measurement Model Results

Variable	Indicators	Code	Loadings	Weight
Knowledge of halal industry ($\alpha=0.912$, CR=0.918, and AVE= 0.738)	I understand the basic principles of halal and haram in production and business activities.	K1	0.864	0.303
	I know the process and requirements of halal certification in Indonesia.	K2	0.877	0.279
	I understand the characteristics and preferences of consumers towards halal products.	K3	0.894	0.314
	I understand the market opportunities and business potential in the halal industry.	K4	0.798	0.266
Awareness of halal industry ($\alpha=0.891$, CR=0.910, and AVE= 0.628)	I care about the application of halal principles in every business activity.	AW1	0.738	0.203
	I realize that entrepreneurship must be in harmony with Islamic values.	AW2	0.830	0.249
	I realize the importance of Islamic ethics in running a halal business.	AW3	0.844	0.195
	It is important to comply with halal standards and regulations in entrepreneurship.	AW4	0.774	0.178
	I am morally responsible for running a halal and ethical business.	AW5	0.791	0.243
	I consistently apply halal principles to business decisions.	AW6	0.772	0.192
Attitude ($\alpha=0.886$, CR=0.913, and AVE= 0.678)	I am interested in running a business in the halal industry.	AT1	0.780	0.230
	I have a positive view of halal entrepreneurship.	AT2	0.878	0.253
	In my opinion, halal entrepreneurship provides economic and social benefits.	AT3	0.852	0.261
	Halal entrepreneurship aligns with the	AT4	0.863	0.247

	values and beliefs I hold.			
	I prefer to run a halal business rather than a non-halal business.	AT5	0.735	0.221
Subjective norm ($\alpha=0.897$, CR=0.922, and AVE= 0.797)	My family supports me if I choose to be an entrepreneur in the halal industry.	SN1	0.905	0.380
	The lecturers and the campus environment encouraged me to be a halal entrepreneur.	SN2	0.900	0.376
	My social environment supports entrepreneurial choices in the halal industry.	SN3	0.873	0.364
Perceived behavioral control ($\alpha=0.908$, CR=0.924, and AVE= 0.671)	I am confident in my ability to run a halal business.	PBC1	0.805	0.264
	I have the skills needed to start a halal business.	PBC2	0.836	0.265
	I have access to halal business capital sources.	PBC3	0.810	0.258
	I have access to halal entrepreneurship training or assistance.	PBC4	0.825	0.273
	Campus institutions support the development of halal entrepreneurship.	PBC5	0.822	0.266
	I have a network that supports the development of halal businesses.	PBC6	0.815	0.271
Entrepreneurial intention toward halal industry ($\alpha=0.911$, CR=0.926, and AVE= 0.677)	I have a strong desire to start a business in the halal industry.	I1	0.852	0.220
	I plan to run a halal business after completing my studies.	I2	0.804	0.213
	I am serious about making halal entrepreneurship a career choice.	I3	0.773	0.183
	I am willing to make a long-term commitment to the halal business.	I4	0.804	0.182
	I am ready to take concrete steps to start a halal business.	I5	0.864	0.206
	If I were an entrepreneur, I would prefer the halal industry to other sectors.	I6	0.836	0.209

The researchers assessed the discriminant's validity using the Heterotrait–Monotrait Ratio (HTMT). The test results showed that all HTMT values across the constructs were below the 0.85 threshold, ranging from 0.436 to 0.830, consistent with the literature. This value shows that each idea is clearly distinct from the others and that the measurements for each do not mix. Once the discriminant validity is confirmed, each part of the model shows that it measures different ideas in both theory and real-world data, indicating they are ready for more detailed analysis (Hair et al., 2017).

The internal model testing in this study aims to examine the causal relationships among latent constructs and test the formulated hypotheses. The internal model was evaluated by examining path coefficients, p-values, R^2 , and effect sizes to assess the strength and contribution of each relationship in the PLS-SEM model (Hair et al., 2023; Harahap et al., 2023). The results are shown in Table 4 and Figure 2. The test results show that all hypotheses in this study are supported by empirical evidence. In the process of forming

attitudes, Industrial Halal Knowledge (K) has a positive and significant influence on Halal Entrepreneurship (AT) attitudes with a coefficient of 0.494 ($p < 0.001$). Meanwhile, Industrial Halal Awareness (AW) also showed a positive and significant influence with a coefficient of 0.380 ($p < 0.001$). An R^2 value of 0.626 indicates that the two variables together explain 62.6% of the variation in attitude, and the effect size falls into the medium to large category.

Table 4. Discriminant Validity (HTMT)

	K	AW	AT	SN	PBC	I
K						
AW	0.702					
AT	0.830	0.775				
SN	0.599	0.666	0.818			
PBC	0.436	0.687	0.638	0.632		
I	0.656	0.752	0.817	0.811	0.751	

Furthermore, Attitude (AT), Subjective Norms (SN), and Perceived Behavior Control (PBC) were found to have a positive and significant effect on Halal Entrepreneurial Intention (I). The most significant influence came from PBC ($\beta = 0.334$), followed by SN ($\beta = 0.312$) and AT ($\beta = 0.311$), all of which were significant at $p < 0.001$. An R^2 value of 0.684 indicates that the three constructs together account for a strong portion of the variance in intention to engage in halal entrepreneurship.

In addition to the direct influence, the results of the mediation analysis showed that Halal Entrepreneurial Attitudes significantly mediated the relationship between Halal Industry Knowledge and Halal Entrepreneurial Intention ($\beta = 0.154$; $p < 0.001$), as well as the relationship between Halal Industry Awareness and Halal Entrepreneurial Intention ($\beta = 0.118$; $p = 0.002$). These findings highlight the important role of attitude as a key mechanism in linking cognitive and affective factors with the development of halal entrepreneurial intentions.

Table 5. Structural Equation Model Hypothesis Test Results

Hypothesis	Relationship	Coefficient	P-Value	Explanation	R2	f2
H1	K → AT	0.494	0.000	Confirmed	0.626	0.390
H2	AW → AT	0.380	0.000	Confirmed		0.231
H3	AT → I	0.311	0.000	Confirmed	0.684	0.135
H4	SN → I	0.312	0.000	Confirmed		0.138
H5	PBC → I	0.334	0.000	Confirmed		0.217
H6	K → AT → I	0.154	0.000	Confirmed		
H7	AW → AT → I	0.118	0.002	Confirmed		

This study shows that knowledge of the halal industry positively and significantly influences students' attitudes toward halal entrepreneurship. These findings support the TPB, which holds that cognitive beliefs about a behavior shape individual attitudes toward it (Ajzen, 1991). In this context, understanding sharia principles, halal certification processes, and opportunities in the halal economy can strengthen students' perceptions of the benefits and feasibility of halal-based business activities, leading to more positive attitudes toward halal entrepreneurship. These results are consistent with previous studies

indicating that halal knowledge plays an important role in shaping attitudes toward halal-related activities. Supaat et al. (2019) explain that knowledge functions as a cognitive belief influencing attitudes, while Kurniawati et al. (2023) found that halal knowledge significantly affects attitudes toward halal products and activities. Similarly, Lazuardy & Hidayat (2025) and Fauziah & Amin (2021) demonstrate that knowledge of halal products is associated with more positive attitudes toward halal consumption and decision-making. Therefore, increasing individuals' understanding of the halal industry can strengthen positive attitudes toward halal entrepreneurship.

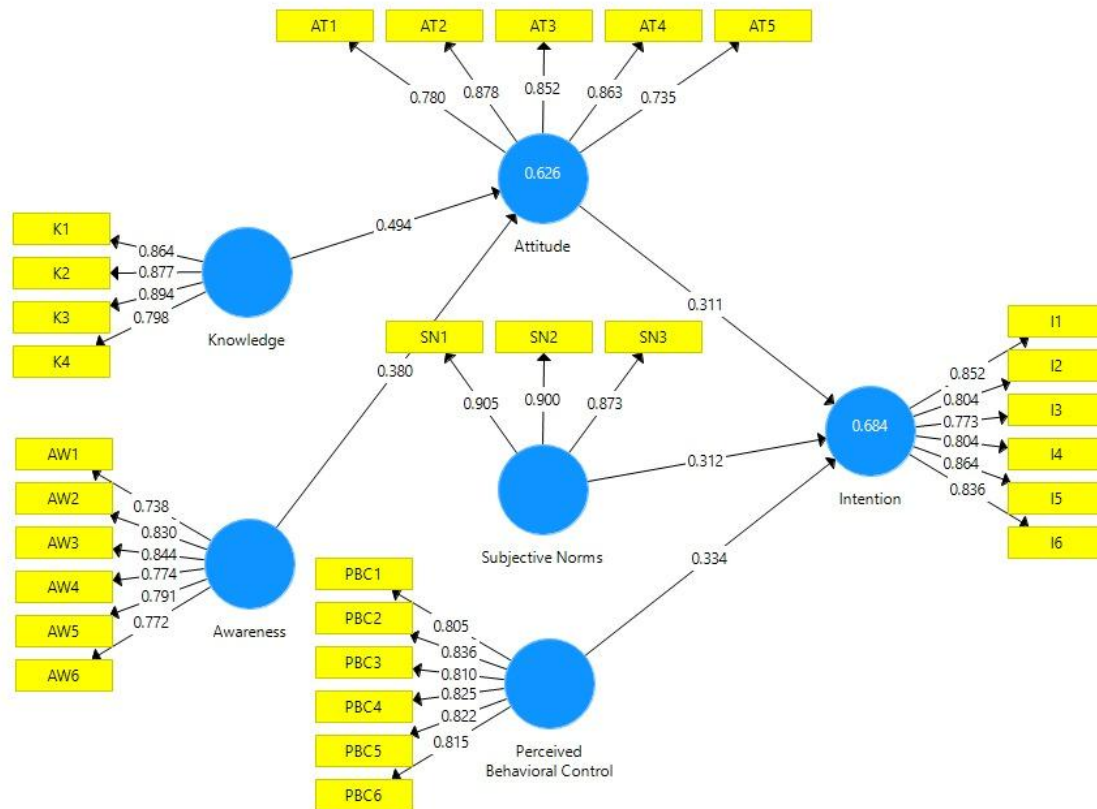


Figure 2. Path Model in Research

Furthermore, awareness of the halal industry was found to have a positive and significant effect on students' halal entrepreneurial attitudes. In line with the Theory of Planned Behavior (TPB), awareness and information about halal standards, certification, and Sharia-based business principles shape individuals' beliefs and evaluations toward halal-related activities. Among students, greater awareness of the importance and opportunities within the halal industry strengthens ethical and religious considerations in business decisions, leading to more positive attitudes toward halal entrepreneurship. This finding is consistent with previous studies showing that halal awareness positively influences attitudes toward halal products and decisions (Aziz et al., 2023; Garofit et al., 2023).

The results of the study indicate that students' attitudes toward halal entrepreneurship have a positive and significant influence on their intention to engage in halal entrepreneurial activities, highlighting the central role of attitudes within the TPB. Students'

beliefs and feelings about starting a halal business are key components of TPB, and a positive outlook toward halal business opportunities increases the likelihood that they will take entrepreneurial action (Halbusi et al., 2023). Empirical evidence further shows that students with favorable attitudes toward halal business opportunities are more likely to become halalpreneurs, and that entrepreneurial attitudes positively influence their intention to engage in halal entrepreneurship (Anwari & Hati, 2020; Iskandar et al., 2026). These findings support the hypothesis that positive attitudes toward halal entrepreneurship enhance students' intention to participate in halal business activities.

In addition, subjective norms were found to positively and significantly influence students' intention to engage in halal entrepreneurship. Subjective norms reflect individuals' perceptions of social pressure or influence from family, educational institutions, and the broader social environment. For students in state Islamic higher education institutions, support from family, teachers, and the socio-religious environment strengthens the social legitimacy of starting a halal business, thereby fostering constructive social pressure. These findings align with the TPB, which posits that social norms can shape an individual's intention to engage in a behavior, including entrepreneurial activities. Empirical evidence in the entrepreneurial and halal contexts confirms this effect, showing that subjective norms increase entrepreneurial intention among young people and value-based groups (Baba et al., 2026; Mizana & Albari, 2024).

Furthermore, perceived behavioral control was found to be the strongest predictor of students' halal entrepreneurial intentions. This suggests that students' self-perceived abilities, skills, access to resources, and institutional support play a crucial role in shaping their intentions to engage in halal entrepreneurship. According to the TPB, the greater an individual's perceived control over a behavior, the stronger their intention to perform that behavior, including starting a business. In the context of the halal industry, support such as training, mentorship, and access to networks enhances students' sense of control, making them more confident in pursuing halal entrepreneurial activities. Empirical evidence confirms that when individuals feel capable and supported, they are more likely to act on their entrepreneurial intentions (Bahjam et al., 2022; Costa et al., 2022; Liao et al., 2022). These findings underscore that perceived behavioral control is a key determinant of halal entrepreneurial intentions, beyond attitudes and social influence.

This study shows that attitudes towards halal entrepreneurship significantly mediate the relationship between halal industry knowledge and intention to engage in halal entrepreneurship. These findings suggest that knowing the principles of halal, certification, and market opportunities does not automatically lead to an intention to start a business. Instead, it first helps individuals form a positive outlook on halal entrepreneurship. According to the TPB, this mechanism aligns with the idea that knowledge-based beliefs influence attitudes, which in turn lead to the formation of intentions (Ajzen, 1991). These findings support those of Hussain et al. (2021), which confirm that attitude is the main pathway linking entrepreneurial knowledge to the intention to start a business.

Furthermore, this study also found that attitudes towards halal entrepreneurship mediated the relationship between awareness of the halal industry and the intention to engage in halal entrepreneurship. Awareness of religious values, Islamic business ethics, and commitment to halal principles shape individual values and preferences, which then emerge as a positive attitude towards halal entrepreneurship. From the perspective of the

SDGs, halal awareness strengthens the affective and normative dimensions of attitudes, which increases the likelihood of intention formation. These findings align with research by Supaat et al. (2019) and Mawardi et al. (2022), which suggests that religious values and ethical awareness influence intentions indirectly by shaping attitudes.

Overall, the mediation findings reinforce the idea that halal entrepreneurial attitudes serve as a key psychological mechanism linking cognitive and normative factors to behavioral intent. This adds to the literature on halal entrepreneurship by providing evidence that integrating knowledge and awareness of values effectively encourages entrepreneurial intentions only when they are internalized as positive attitudes towards such behaviors. Therefore, policy and educational interventions should be designed to improve halal literacy and values awareness, explicitly shaping students' attitudes towards halal entrepreneurship.

Conclusion

This study examines the factors influencing students' intention to start halal businesses at PTKIN in Indonesia, extending the Theory of Planned Behavior (TPB) by including knowledge and awareness of the halal industry. The results show that knowledge and awareness positively influence students' attitudes toward halal entrepreneurship, which in turn mediates the relationship between knowledge/awareness and the intention to start a halal business. Additionally, positive attitudes, supportive social norms, and perceived behavioral control directly contribute to students' entrepreneurial intentions, with perceived behavioral control being the strongest predictor.

From a theoretical perspective, the findings reinforce TPB by highlighting the mediating role of entrepreneurial attitudes in linking knowledge and awareness of the halal industry to entrepreneurial intentions. This demonstrates how value-based education can transform ethical and religious understanding into actionable business decisions, connecting students' cognitive and affective evaluations with their behavioral intentions. The study suggests that PTKIN institutions can strengthen students' entrepreneurial readiness by enhancing knowledge and awareness, fostering positive attitudes, and integrating ethical halal business values into curricula and training programs.

For practical recommendations, PTKIN leaders and policymakers should focus on improving perceived behavioral control through supportive systems, including halal entrepreneurship curricula, startup assistance, access to Sharia-compliant financial services, and collaborations with BPJPH and LPPOM. Future research should use longitudinal designs, include students from non-religious universities and active halal entrepreneurs, and consider institutional and regulatory factors to enhance generalizability. Emphasizing attitude as a mediator ensures that knowledge and awareness effectively translate into strong, actionable intentions to start and sustain halal businesses.

References

- Adelaja, A. A., Akinbami, C. A. O., Jiboye, T., & Ogbolu, G. (2023). Students' intention towards self-employment: An application of ELT theory on the effectiveness of entrepreneurial education types. *The International Journal of Management Education*, 21(2).
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2 December), 179–211.
- Albra, W., Muchtar, D., & Safitri, R. (2023). The Role of Halal Awareness on the Relationship

- between Religiosity and Halal Purchase Intention. *International Journal of Islamic Economics and Finance (IJIEF)*, 6(July), 313–336.
- Antara News. (2025). *PTKIN hadirkan integrasi ilmu dan nilai keagamaan Islam moderat*. Www.Antaraneews.Com. <https://www.antaranews.com/berita/4683497/ptkin-hadirkan-integrasi-ilmu-dan-nilai-keagamaan-islam-moderat?>
- Anwari, M., & Hati, S. R. H. (2020). Analysis of Motivational Factors Of MSMEs Entrepreneurs to Be Halalpreneurs. *International Journal of Business and Society*, 21(3), 1122–1138.
- Aziz, A., Pratama, N., Hamidi, M. L., & Cahyono, E. (2023). The effect of halal brand awareness on purchase intention in indonesia : the mediating role of attitude The effect of halal brand awareness on purchase intention in indonesia : the mediating role of attitude. *Cogent Business & Management*, 10(1). <https://doi.org/10.1080/23311975.2023.2168510>
- Baba, R., Keling, W., & Yap, C. S. (2026). The effect of subjective norms, attitude and start-up capital on the entrepreneurial intention of the Indigenous people in Malaysia. *Journal of Enterprising Communities: People and Places in the Global Economy*, 1750–6204(February), 1–28. <https://doi.org/10.1108/JEC-05-2024-0100>
- Bahjam, Z., Ariffin, S. K., & Wahid, N. A. (2022). Consuming Halal Products: The Dynamics of Trustworthiness, Self-Efficacy and Purchase Intention. *Global Journal Al-Thaqafah (GJAT)*, 122–134.
- Biro Hubungan Masyarakat. (2024). *Kemenperin Dukung Industri Halal Optimalkan Peluang dan Jawab Tantangan Global*. <https://www.komdigi.go.id/berita/artikel-gpr/detail/kemenperin-dukung-industri-halal-optimalkan-peluang-dan-jawab-tantangan-global>
- Boucif, S. A., Nawang, W. R. W., Saadallah, O., & Amalina, M. (2025). Extending the theory of planned behavior in predicting entrepreneurial intention among university students: The role of perceived relational support. *The International Journal of Management Education*, 23(2).
- Costa, N., Oliveira, C., & Martins, E. (2022). Student’s Entrepreneurial Intention in Higher Education at ISLA – Student’s Entrepreneurial Intention in Higher Education at ISLA – Instituto Politécnico de Gestão e Tecnologia Instituto Politécnico de Gestão e Tecnologia. *Procedia Computer Science*, 204, 825–835. <https://doi.org/10.1016/j.procs.2022.08.100>
- Dewi, K., Rahmadani, N., Wardana, C. K., & Husna, N. (2026). How social media marketing influence green purchase intention: based on Theory of Planned Behavior. *Manajemen Dan Bisnis*, 25(1), 1–10.
- Direktorat Perwilayahan Industri. (2025). *Potensi dan Peluang Besar, Menperin Optimistis Indonesia Jadi Pusat Industri Halal Dunia*. <https://kpai.kemenperin.go.id/id/news/potensi-dan-peluang-besar-menperin-optimistis-indonesia-jadi-pusat-industri-halal-dunia>
- Duong, C. D., & Tran, V. T. (2024). Social cognitive career theory and higher education students’ entrepreneurial intention: The role of perceived educational support and perceived entrepreneurial opportunity. *Journal of Entrepreneurship, Management and Innovation*, 20(1), 86–102.
- Fauziah, S., & Amin, N. H. Al. (2021). The Influence of Product Knowledge, Religiosity, Halal Awareness of Purchasing Decisions on Halal Products With Attitude as a Mediation Variable. *Journal of Management and Islamic Finance*, 1(2), 249–266.
- Fayolle, A., & Liñán, F. (2014). The future of research on entrepreneurial intentions. *Journal of Business Research*, 67(5), 663–666.
- Firdaus, D. H., Ma, A. S., & Rouf, A. (2025). The Role of Islamic Higher Education in Strengthening the Halal Ecosystem in Indonesia. *Peradaban Journal Religion and Society*, 4(1), 1–14.
- Garofit, L. I., Muresan, I. C., Arion, I. D., & Arion, F. H. (2023). The Influence of Economic and

- Entrepreneurial Education on Perception and Attitudes towards Entrepreneurship. *Administrative Sciences*, 13(212), 1–20.
- Ha, S. T., Thanh, T., Phan, H., Viet, T., & Ngo, N. (2025). Integrating artificial intelligence competencies into the theory of planned behavior : Explaining sustainability-oriented entrepreneurial intentions. *Journal of Entrepreneurship, Management and Innovation*, 21(4), 30–53.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (p. 165). Thousand Oaks: Sage.
- Hair, J. R., F, S., M Ringle, C. M., & Gudergan, S. P. (2023). Advanced issues in partial least squares structural equation modeling. *Sage Publications*, 6(May), 297.
- Halbusi, H. Al, Soto-Acosta, P., & Popa, S. (2023). Analysing e-entrepreneurial intention from the theory of planned behaviour: the role of social media use and perceived social support. *International Entrepreneurship and Management Journal*, 19, 1611–1642.
- Handriana, T., Yulianti, P., Kurniawati, M., Arina, N. A., Aisyah, R. A., Aryani, M. G. A., & Wandira, R. K. (2020). Purchase behavior of millennial female generation on Halal cosmetic products. *Journal of Islamic Marketing*, 12(7), 1295–1315.
- Harahap, D., Afandi, A., & Siregar, T. M. (2023). The Islamic Banking Customers' Intention To Use Digital Banking Services: an Indonesian Study. *Journal of Islamic Monetary Economics and Finance*, 9(3), 533–558. <https://doi.org/10.21098/jimf.v9i3.1673>
- Hardiana, D., Mainata, D., & Birusman, M. (2023). Halal Industry: A Literature Bibliometric Analysis on Halal Studies. *MAZAHIB Jurnal Pemikiran Hukum Islam*, 22(1), 175–211.
- Hussain, T., Muhammad, Z. U. R., & Abbas, S. (2021). Role of entrepreneurial knowledge and personal attitude in developing entrepreneurial intentions in business graduates: a case of Pakistan. *Journal of Global Entrepreneurship Research*, 11, 439–449.
- Iskandar, I., Rahmat, P. S., Mulyati, S., Juliana, J., Miftahuddin, A., Sojanah, J., Ismail, S., & Qudratov, I. (2026). Halal Entrepreneurship Intention among Muslim Students: The Mediating Role of Attitude, Risk-Taking Propensity, and Self-Efficacy. *Indonesian Journal of Halal Research*, 8(1), 18–33.
- Juma, I., Mussa, N., & Abdi, I. (2025). Enhancing halal entrepreneurial intention: The impact of halal entrepreneurship education and halal entrepreneurial awareness. *Social Sciences & Humanities Open*, 11(January 2024), 101548. <https://doi.org/10.1016/j.ssaho.2025.101548>
- Kemenkeu. (2025). *Indonesia Kokoh di Peringkat Tiga Ekonomi Syariah Global, Perkuat Posisi Sebagai Pemain Kunci Dunia*. <https://www.kemenkeu.go.id/informasi-publik/publikasi/berita-utama/Indonesia-Peringkat-Tiga-Ekonomi-Syariah-Global>
- Kurniawati, S., Juniarti, R. P., Omar, A., & Ridlwan, A. A. (2023). Revealing well-educated millennials' purchase intention on halal cosmetics: The role of knowledge, religiosity, and attitude. *Al-Uqud : Journal of Islamic Economics*, 7(01), 95–109.
- Lazuardy, I. T., & Hidayat, A. (2025). The Impact of Halal Product Knowledge on Purchase Intention by Enhancing Attitudes Toward Halal Food. *Jurnal Ekonomi Dan Bisnis*, 26(1).
- Liao, Y. K., Huu, V., Nguyen, A., & Caputo, A. (2022). Unveiling the role of entrepreneurial knowledge and cognition as antecedents of entrepreneurial intention : a meta-analytic study. *International Entrepreneurship and Management Journal*, 1623–1652. <https://doi.org/10.1007/s11365-022-00803-8>
- Mahfud, T., Bruri, M., Sudira, P., & Mulyani, Y. (2020). The influence of social capital and entrepreneurial attitude orientation on entrepreneurial intentions : the mediating role of psychological capital. *European Research on Management and Business Economics*, 26(1), 33–39. <https://doi.org/10.1016/j.iedeen.2019.12.005>
- Mawardi, M. K., Sujarwoto, & Sahputri, R. A. M. (2022). A Multidimensional Model of Planned Behavior Theory and Its Prediction on Entrepreneurial Intention. *MIX: Jurnal Ilmiah Manajemen*, 12(2), 319–333.
- Mizana, A., & Albari, A. (2024). The Influence of Subjective Norms and Religiosity on the

- Purchase Intention of Halal Products with the Mediator Variable of Consumer Attitudes. *Journal of Economics, Management and Trade*, 30(1), 9–18. <https://doi.org/10.9734/JEMT/2024/v30i11185>
- Nabi, G., Fayolle, A., Lyon, E. M., Krueger, N., & Walmsley, A. (2017). The Impact of Entrepreneurship Education in Higher Education: A Systematic Review and Research Agenda. *Academy of Management Learning & Education*, 16(2), 277–299.
- Nájera, J. J. S., Pérez, C. P., & González, T. T. (2023). Exploring the knowledge structure of entrepreneurship education and entrepreneurial intention. *International Entrepreneurship and Management Journal*, 19, 563–597. <https://doi.org/10.1007/s11365-022-00814-5>
- Niswa, H., Diana, I. N., & Yuliana, I. (2026). Determinants of food producers' intentions to obtain halal certification: An integrated TPB – halal model in Bali, Indonesia. *Journal of Islamic Economics Lariba*, 12(1), 135–166.
- Oré, S. B.-. (2023). The Theory of Planned Behaviour and the Entrepreneurial Intention of University Students. *Journal of Turkish Science Education*, 20(1), 136–149.
- Riswandi, W. N., Sudarsono, H., Rahmi, A. N., & Hamza, A. (2023). The intention of the young Muslim generation to purchase halal cosmetics: Do religiosity and halal knowledge matter? *Asian Journal of Islamic Management (AJIM)*, 4(2), 150–162.
- Rizal, A. S., Elazumi, A., Alnajar, A., & Permadi, E. G. (2024). Moral judgment as a pivotal modulator in entrepreneurial cognition frameworks. *Manajemen Dan Bisnis*, 23(2), 462–479. <https://doi.org/10.24123/jmb.v23i2.837>
- Supaat, S. H., Nizam, N. Z., & Ahamat, A. (2019). Through the Theory of Planned Behaviour (TPB) for Extended Model of Entrepreneurs Intentions to Involve in Halal Industry. *International Journal of Recent Technology and Engineering (IJRTE)*, 3878(4), 4450–4458. <https://doi.org/10.35940/ijrte.D8392.118419>
- Tandelilin, E., Darmasetiawan, N. K., & Krisantana, I. (2016). Entrepreneurship Culture and Entrepreneurship Course: Do They Support Students' Entrepreneurship Intention? *Journal of Management and Business*, 15(2), 58–64.
- Widjaja, I., Arifin, A. Z., & Setini, M. (2020). The effects of financial literacy and subjective norms on saving behavior. *Management Science Letters*, 10(15), 3635–3642. <https://doi.org/10.5267/j.msl.2020.6.030>
- Xanthopoulou, P., & Sahinidis, A. (2024). administrative sciences Students' Entrepreneurial Intention and Its Influencing Factors: A Systematic Literature Review. *Administrative Sciences*, 14(98), 1–28.
- Yudha, S. Y. (2025, November 5). *Industri halal jadi penopang baru ekonomi nasional*. *Republika*. <https://sharia.republika.co.id/berita/t598sy416/industri-halal-jadi-penopang-baru-ekonomi-nasional>
- Zuhri, H., Yahya, P. P., & Abroto. (2025). Community Engagement in State Islamic Higher Education Institutions: A Paradigmatic Critique. *Mangabdi Journal of Community Engagement in Religion, Social, and Humanities*, 2(1), 18–34.