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Predicting Professional Entrepreneurial Intention Through Core Determinants of Entrepreneurial Attitude

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ABSTRACT

The level of entrepreneurship among professional pharmacists is comparable to Indonesia's overall level of entrepreneurship, which is relatively low. **This phenomenon** is associated with entrepreneurial marketing behavior focused on Entrepreneurial Intention. For the first time in the context of professional pharmacists in Greater Jakarta, the influence of Entrepreneurial Education (EE) and Entrepreneurial Self-efficacy (ESE) on Entrepreneurial Attitude (EA) and its implications for Entrepreneurial Intention (EI) was observed using the Theory of Planned Behavior (TPB). Through proportional random sampling, 391 pharmacists were selected using the Slovin formula (5% margin of error). Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM) were used for **quantitative analysis**. **The findings** showed that ESE was the most powerful factor, with EE, ESE and EA all having positive and substantial direct effects on EI. The mediating effect of EA was evident in the influence of ESE on EI, but not EE. **This study's novel** approach lies in its consideration of the unique characteristics of healthcare entrepreneurship, which differ from general entrepreneurship due to constraints such as the complexity of the dual role. **This research** provides business insights to promote EI as necessity among professional pharmacists.

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1. INTRODUCTION

Professionalism and entrepreneurship are two sides of the same coin that can be combined in today's globalized world. This phenomenon is part of entrepreneurial marketing, which has its advantages and disadvantages. Entrepreneurship is essential for economic growth, and similarly, professionals also play a crucial role in economic development. Pharmacists, as healthcare professionals with specialized pharmacy expertise, embody this dual potential. According to the resource-advantage theory-based entrepreneurial marketing model, professional pharmacists with the necessary competencies, knowledge, skills, and experience can become entrepreneurs in their field. The ability to identify good business opportunities is maximized when individuals possess the necessary skills, knowledge, and experience or are not afraid of failure, as entrepreneurship involves seeing opportunities and taking risks [1]. These dimensions are the main elements of entrepreneurial marketing.

The ability to turn professional expertise into entrepreneurial potential reflects the importance of knowledge, skills, and risk-taking behavior in shaping entrepreneurial actions. Individuals with strong con-

fidence and competence are better positioned to recognize, evaluate, and pursue new opportunities. In the context of pharmacy, these attributes determine how effectively pharmacists can innovate, develop independent practices, or introduce new healthcare services. Thus, entrepreneurial marketing becomes a bridge that connects professional capabilities with entrepreneurial behavior.

The exact number of pharmacists who practice independently or collaborate with capital owners has not been clearly revealed. However, empirical research data shows that at least 77.8% of practicing pharmacists collaborate with capital owners, while the remaining 22.2% practice independently [2]. Independent practice essentially serves as a model for entrepreneurial pharmacists who capitalize on business opportunities within their field. The relatively low level of entrepreneurship among pharmacists aligns with the general state of entrepreneurship in Indonesia. According to mid-2023 data from the Central Statistics Agency (BPS), Indonesia's entrepreneurial ratio remains relatively low at 3.47%, which is lower than that of Singapore (8.76%) and Malaysia (4.7%).

This entrepreneurial marketing phenomenon reflects entrepreneurial behavior, which experts describe as being centered on EI. According to the TPB, intention is the starting point for forming a person's behavior. Therefore, efforts to increase entrepreneurial behavior must begin with strengthening EI. According to experts, research related to the concept of EI must also be contextualized. A literature review revealed a research gap, no studies have examined the relationship between ESE, EE, and EA, as well as its implications for EI, in the context of professional pharmacists in Greater Jakarta.

2. LITERATURE REVIEW

2.1. Theory of Planned Behavior and Social Cognition Theory

This study is theoretically grounded in Ajzen's Theory of Planned Behavior (TPB), a widely utilized framework in the social sciences that predicts an individual's intention to engage in a specific behavior through three main explanatory factors, attitude toward the behavior, subjective norms, and perceived behavioral control. TPB has been applied to EI models and has recently expanded to public health contexts [3].

The study also incorporates Bandura's Social Cognitive Theory (SCT), which examines how knowledge, beliefs, attitudes, and cognitive processes are acquired through social interactions in various contexts, including family, university, and community settings [4]. A central concept within SCT is self-efficacy, which is defined as an individual's belief in their ability to perform behaviors that will achieve desired outcomes. In entrepreneurial contexts, this concept manifests as ESE [5].

2.2. Entrepreneurial Education (EE) and Entrepreneurial Self-efficacy (ESE)

EE is a learning activity that involves improving knowledge, skills, attitudes, and personal character related to entrepreneurship [6]. It can be defined as the transmission of entrepreneurial competencies [7]. EE has three dimensions, knowledge, skills, and experience [8]. The basic function of EE focuses on enriching knowledge, skills, and attitudes related to entrepreneurship [9].

ESE is a measure of an individual's belief in his or her ability to successfully start an entrepreneurial venture. It emphasizes critical tasks in new venture formation, such as innovation, management, finance, and marketing [10]. Similarly, it can be defined as an individual's self-belief that they can perform various entrepreneurial roles and tasks [11]. ESE stems from the concept of self-efficacy, which is an individual's confidence in their ability to perform tasks related to marketing, management, and risk-taking in an entrepreneurial setting. ESE has several dimensions, marketing ESE, innovation ESE, management ESE, and risk-taking ESE, financial control ESE [12].

2.3. Entrepreneurial Attitude (EA) and Entrepreneurial Intention (EI)

EA is the extent to which a person considers entrepreneurial behavior and its consequences to be valuable, beneficial, and profitable. It has three dimensions, cognition, affection, and conation [7]. Attitude toward entrepreneurship is the degree to which the individual holds positive or negative personal valuation about being an entrepreneur [13]. An EA is a crucial aspect of EI analysis, as it involves emotional elements implicitly associated with entrepreneurial actions [14].

EI is an individual's self-belief that they intend and plan to start a new business in the future [15]. It is a state of mind that guides an individual's actions in developing and implementing a new business [16]. Similarly, that it is an individual's willingness, desire, and preparation to choose entrepreneurship as a career path and participate in entrepreneurial activities [17]. EI has the following dimensions, Choice Intention, Commitment

to Entrepreneurship, and Nascent Entrepreneurship [18]. In summary, EI is the desire, willingness, or state of mind that motivates individuals to make decisions and take actions to prepare for starting a new business in the future.

2.4. Hypothesis and Conseptual Framework

The influence of EE on EA has been demonstrated and proven to be significant [8]. Similarly, a study in Vietnam and Korea concluded that EE influences students' attitudes toward entrepreneurship [19]. Another study in Pakistan confirmed the positive influence of EE on EA as well [20].

Hypothesis 1 (H1): EE positively influences EA among pharmacists in Greater Jakarta.

A study of 327 university students in Fujian, China concluded that ESE significantly and positively affects EA [21]. Similarly, the significant influence of ESE on EA was confirmed among Indonesian university students [6]. These studies reinforce previous finding on Indonesian university students in different region [22] and an empirical study of 241 nascent entrepreneurs in Africa, which yielded similar results [23].

Hypothesis 2 (H2): ESE positively affects EA among pharmacists in Greater Jakarta.

Numerous studies have examined the influence of EE on EI, yielding mixed results [24]. Using a structural equation model, a significant positive relationship was found between EE and EI in a study of cross-sectional data from university students in Tehran [25]. The TPB theory was used to examine Chinese university students. It was found that EE significantly and positively affects EI [21].

Hypothesis 3 (H3): EE positively affects EI among pharmacists in Greater Jakarta.

The effect of ESE on EI among university students was significantly positive [5]. Aspects of EI in the smart city of Neom, Saudi Arabia were examined based on ESE [26]. These findings align with those of a study of Chinese students that used the TPB theory as a reference [21]. The same can be said for Malaysian students [27].

Hypothesis 4 (H4): ESE positively influences EI among pharmacists in Greater Jakarta.

EA has a significant positive impact on EI [7]. Similarly, the influence of EA on EI has been investigated among Taiwanese university students, and it has been confirmed that EA influences EI [15]. Furthermore, a study of young adults in China concluded that EA influences EI [20]. Other studies with different locations but similar conclusions have been conducted in Malaysia and Spain [8, 11].

Hypothesis 5 (H5): EA positively influences EI among pharmacists in Greater Jakarta.

Higher levels of education in entrepreneurship lead to more positive EA and stronger EI [16]. The EA model is used as a mediating variable in the relationship between EE and EI [21]. A partial mediation model of EA was found in this relationship [28]. EA is a proximal determinant of EI, while EE is a distal determinant. These results indicate an indirect relationship between EE and EI through EA [29].

Hypothesis 6 (H6): EA mediates the positive influence of EE on EI among pharmacists in Greater Jakarta.

Although several experts have discussed the EA mediation model for the influence of ESE on EI, the results are inconsistent. One study examined the EA model as a mediating variable for the influence of ESE on EI in Indonesian college students and found significant results [6]. These results were confirmed in China [21]. The previous findings were confirmed, indicating the existence of sequential mediation, self-efficacy influences attitude, which then influences intention. Thus, ESE influences EI by fostering a positive attitude toward entrepreneurship [30].

Hypothesis 7 (H7): EA mediates the positive influence of ESE on EI among pharmacists in Greater Jakarta.

2.5. Conceptual Framework

This study framework, based on the TPB combined with entrepreneurial marketing elements, incorporates three key categories of variables endogenous, exogenous, and mediating and is visually represented in Figure 1 through both direct and indirect effect pathways. In the direct structure, EI functions as the endogenous variable influenced by EE, ESE, and EA, while EA also acts as an endogenous variable shaped by EE and ESE [31]. In the indirect structure, EA serves as a mediating variable that channels the effects of EE and ESE toward EI, highlighting how attitudes shape the intention-formation process. Applied to the unique context of healthcare entrepreneurship, this framework provides a comprehensive explanation of how personal experience, perceived capability, and attitudinal factors interact with entrepreneurial marketing components such as opportunity recognition and resource utilization. It further demonstrates that entrepreneurial behavior

among pharmacists emerges not only from technical expertise but also from psychological readiness, confidence in managing risks, and the ability to leverage professional competencies to identify and pursue business opportunities within the pharmaceutical field.

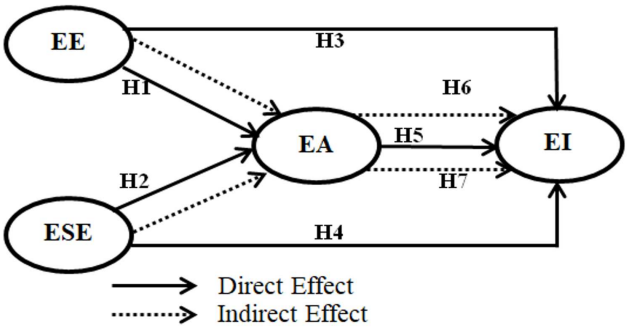

Figure 1. Conceptual Framework

Figure 1 provides a visual representation of the hypothesized relationships between the constructs, outlining both direct and indirect pathways that underpin the proposed research model. The framework illustrates how EE and ESE influence EA and, subsequently, EI. In this structure, EA functions not only as an endogenous variable affected by EE and ESE but also as a mediating variable that transmits their effects toward EI. The inclusion of both direct and indirect effects enables a more comprehensive understanding of the psychological and experiential mechanisms shaping EI within healthcare entrepreneurship. This conceptual structure serves as the foundation for developing hypotheses and guiding the empirical analysis in the subsequent sections of the study [32].

3. METHODS

This is an explanatory, cross-sectional, quantitative research design [33]. Since the study's endogenous and exogenous variables are abstract and cannot be measured directly, they are conceptualized as second-order dimensions and indicators. This study has 14 research dimensions. EE is an exogenous variable with three dimensions. ESE is an exogenous variable with five dimensions. EA is an endogenous variable in relation to EE and ESE, or an exogenous variable in relation to EI. EI is an endogenous variable with three dimensions [34].

The researcher collected quantitative primary data from professional pharmacists in the form of questionnaires. The population in this study consists of all pharmacists registered with the Indonesian Pharmacists Association (IAI). As of 2022, there were 16,941 individuals registered in the Greater Jakarta region. The sample size was determined using the Slovin formula with a 5% margin of error, resulting in 391 respondents. Proportional random sampling was used based on the proportion of pharmacists from the three regions that comprise Greater Jakarta.

Instrument testing was conducted using a second-order measurement model. The analysis included testing the validity and reliability of the data using second-order CFA [35]. The structural model analysis identified two main structural equations, the EA sub-structural model and the EI structural model. Several fit indices were used to determine the acceptability of the model. The several model fit was evaluated using multiple GOF indices. Statistical hypothesis testing uses SEM. This approach allows for a comprehensive evaluation of both the measurement and structural models, ensuring that the relationships among latent variables are statistically robust and theoretically consistent.

Because this research is explanatory in nature and has a large sample size (n = 391), as well as because second-order CFA was used, the Lisrel-SEM tool was chosen [36]. Finally, we tested the hypothesis of the direct effect of the exogenous variable on the endogenous variable using the t-test statistic based on the structural model output (t-value). Hypothesis testing of the mediating variable was conducted using the Sobel test (z-sobel). All hypothesis tests were conducted at a 95% confidence level (α = 0.05). The critical t- and z-values of 1.96 were used as the thresholds [30].

4. RESULT AND DISCUSSION

4.1. Research Results

4.1.1. Measurement Model Analysis (Outer Model)

The results of the measurement model analysis, conducted via CFA. The results show that all observed variables have Standardized Loading Factor (SLF) > 0.5 and T-value > 1.96. Therefore, it can be concluded that all observed variables are valid against their latent variables. All Construct Reliability (CR) values are greater than 0.70, and all Variance Extracted (VE) values are greater than 0.50. Therefore, it was concluded that the reliability of all measurement models (constructs) was reliable.

4.1.2. Structural Model Analysis (Inner Model)

Before testing the research hypotheses, the structural model analysis is conducted to evaluate the relationships among the latent constructs. This analysis examines the magnitude of the path coefficients, which indicate both the strength and direction of the influence exerted by one variable on another [37]. The purpose of this stage is to confirm whether the theoretical relationships proposed in the research framework are supported by the empirical data. To facilitate interpretation, the results of the structural model are presented in a diagram that visualizes the direct effects across the constructs. This visualization is shown in Figure 2, which illustrates the standardized solution output of the overall structural model.

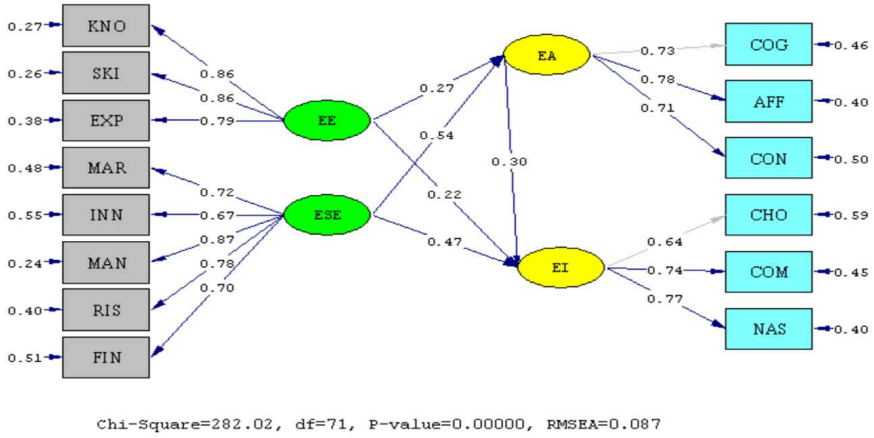

Figure 2. Structural Model Diagram Output (Standardized Solution)

Figure 2 shows the standardized solution output of the structural model diagram used to examine the direct effect hypothesis. The numbers on the arrows represent the path coefficients, which show the direct effect of one variable on another. First, a structural model path coefficient analysis (standardized solution) is performed to determine the structural model equation. Based on the research paradigm, there are two structural models, The first is the EA sub-structural model, and the second is the EI structural model. The path coefficients of these two models are written in the following two structural equations.

$$\begin{aligned} \text{EA} &= 0.27\,\text{EE} + 0.54\,\text{ESE}, \quad \text{Errorvar.} = 0.43,\ R^2 = 0.57 \\ &\quad (0.11) \quad (0.12) \quad (0.10) \\ &\quad 2.38 \quad 4.53 \quad 4.23 \\ \text{EI} &= 0.30\,\text{EA} + 0.22\,\text{EE} + 0.47\,\text{ESE}, \quad \text{Errorvar.} = 0.20,\ R^2 = 0.80 \\ &\quad (0.12) \quad (0.10) \quad (0.13) \quad (0.073) \\ &\quad 2.53 \quad 2.14 \quad 3.72 \quad 2.75 \end{aligned}$$

From the two structural equations above, it can be seen that all determinants in the EA and EI models have positive directional coefficients. Both structural equations revealed that the ESE variable was the most dominant determining factor in both the EA and EI models. The structural equation also shows that the coefficient of determination (R^2) for the EA sub-structural equation (EA equation) is 0.57. The R^2 for the structural equation (EI equation) is 0.80, indicating that the integration of the exogenous variables EE, ESE, and EA

contributes 80% to the endogenous variable EI, with the rest influenced by factors outside this model that were not studied.

4.1.3. Goodness-of-Fit (GOF) Test

Four to five GOF criteria are sufficient for assessing a model's suitability, provided that each GOF group is represented, including absolute fit indices, incremental fit indices, and parsimonious fit indices [38]. As shown in Table 1, all GOF groups demonstrate values ranging from marginal fit to good fit, indicating that the structural model meets the recommended statistical thresholds for model adequacy. The absolute fit indices, such as chi-square, RMSEA, and RMR, reflect a strong overall correspondence between the observed and estimated covariance matrices, confirming that the model captures the underlying data structure effectively. The incremental fit indices, including NFI, CFI, and IFI, also show high values, suggesting that the proposed model performs significantly better than the null model and demonstrates strong comparative fit. Furthermore, the Parsimonious Fit Index (PNFI) indicates that the model maintains an appropriate balance between GOF and model simplicity, avoiding overfitting while retaining explanatory power. Collectively, these results confirm that the research model is statistically sound, theoretically coherent, and robust enough to serve as a reliable foundation for subsequent hypothesis testing and advanced structural analyses.

Table 1. Goodness-of-Fit Test

No	GOF Measure	Cut off	Results	Conclusion
Absolut Fit Indices				
1	X2 chi-square (df=700, α=0.83)	Low, $p > 0.005$	760.73	Good Fit
2	Goodness-of-Fit (GOF) Indices	≥ 0.9	0.830	Marginal Fit
3	Root Mean S. Error of Approx. (RMSEA)	< 0.05	0.048	Good Fit
4	Root Mean Square Residual (RMR)	< 0.05	0.014	Good Fit
Incremental Fit Indices				
5	Adjusted Goodness of Fit (AGFI)	≥ 0.9	0.810	Marginal Fit
6	Normed Fit Indices (NFI)	≥ 0.9	0.970	Good Fit
7	Comparative Fit Indices (CFI)	≥ 0.9	0.980	Good Fit
8	Incremental Fit Indices (IFI)	≥ 0.9	0.980	Good Fit
Parsimony Fit Index				
9	Parsimony Normed Fit Index (PNFI)	≥ 0.9	0.900	Good Fit

Source: primary data processed

The results presented in Table 1 shows that the model meets the essential GOF requirements across absolute, incremental, and parsimonious indices. Despite a few marginal values, most indicators such as RMSEA, RMR, NFI, CFI, IFI, and PNFI demonstrate a good fit. These results confirm that the structural model adequately represents the data and is suitable for proceeding with further hypothesis testing.

4.1.4. Statistical Hypothesis Testing

Statistical hypothesis testing was conducted using SEM with the Lisrel-SEM tool. In this study, the t-test statistic (t-value) was used for hypothesis testing of the direct effects of exogenous variables on endogenous variables.

Figure 3 shows the t-value output of the structural model diagram for statistical hypothesis testing. In Lisrel output, t-values indicate the statistical significance of parameters. For large samples, a parameter is considered statistically significant when the absolute t-value is greater than the critical value of 1.96 ($t > 1.96$), which is significant at a two-tailed test with an α level of 0.05 [36]. Numbers on arrows represent t-values and used to assess statistical significance of relationships. Starting with the exogenous variable EE towards the endogenous variable EA, the t-value was 2.38. Similarly, the t-value was 4.53 for the exogenous variable ESE towards the endogenous variable EA, and 2.14 for the exogenous variable EE towards the endogenous variable EI. Similarly, the t-value was 3.72 for the exogenous variable ESE towards the endogenous variable EI, and 2.53 for the exogenous variable EA towards the endogenous variable EI. These t-values all demonstrate a highly significant effect of the exogenous variables on the endogenous variables, as evidenced by the t-value of 1.96 ($p < 0.001$), which substantially exceeds the critical threshold. A summary of the results for all seven hypotheses is listed below.

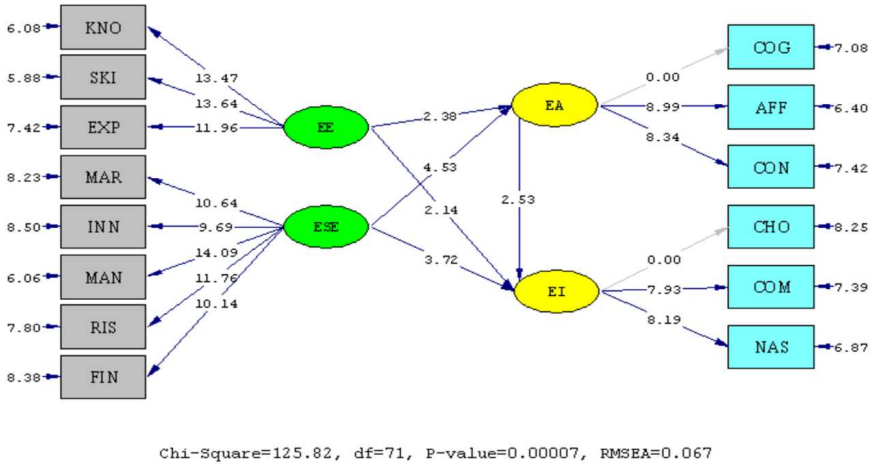

Figure 3. Structural Model Diagram Output (T-Value)

Table 2. Summary of Hypothesis Test Results

Hypothesis	**Path**	**t-count***	**Conclusion**
H1	EE → EA	2.38	Accepted
H2	ESE → EA	4.53	Accepted
H3	EE → EI	2.14	Accepted
H4	ESE → EI	3.72	Accepted
H5	EA → EI	2.53	Accepted
Hypothesis	**Path**	**z-Sobel***	**Conclusion**
H6	EE → EA → EI	1.75	Rejected
H7	ESE → EA → EI	2.19	Accepted

*t-count $>$ 1.96: significant at $\alpha = 0.05$ (p<0.05); *z-Sobel $>$ 1.96: significant at $\alpha = 0.05$ (p<0.05)
EE: Entrepreneurial Education; ESE: Entrepreneurial Self-efficacy; EA: Entrepreneurial Attitude;
EI: Entrepreneurial Intention

Table 2 summarizes the results of the statistical hypothesis tests (H1-H7) performed using Lisrel 8.8. The results of H1-H5 are based on the T-value (t-count) obtained from the structural model diagram. The T-value for the path from EE to EA is 2.38 ($p < 0.005$), which exceeds the critical value of 1.96 ($p < 0.05$). This indicates that H1 is accepted, meaning that EE has a statistically significant positive effect on EA. Similarly, the T-value for the path from ESE to EA is 4.53, exceeding the critical value of 1.96 ($p < 0.05$). Therefore, H2 is accepted, indicating that ESE has a statistically significant positive effect on EA. The T-value for the path from EE to EI is 2.14 ($p < 0.005$) and is greater than the critical value of 1.96 ($p < 0.05$). This proves that H3 is accepted and that EE has a statistically significant positive effect on EI. Likewise, the value for the path from ESE to EI is 3.72, exceeding the critical value of 1.96 ($p < 0.05$). This reveals that H4 is accepted, suggesting a positive and statistically significant effect of ESE on EI. In harmony, the value for the path from EA to EI is 2.53, which exceeds the critical value of 1.96 ($p < 0.05$). This indicates that H5 is accepted, meaning that there is a statistically significant positive effect of EA on EI.

Table 2 also contains a summary of the results of hypotheses H6 and H7. The Sobel test was used to determine whether the mediating variables significantly influence the effects of the independent variables on the dependent variable. The Sobel z-value for the path from EE to EI via EA is 1.75 ($p < 0.005$), which is less than the critical value of 1.96 ($p < 0.05$). This indicates that H6 is rejected, meaning that EE does not have a statistically significant positive effect on EI via EA. The Sobel z-value for the path from ESE to EI via EA is 2.19 ($p < 0.005$), which is greater than the critical value of 1.96 ($p < 0.05$). This proves that H7 is accepted, showing that EE has a statistically significant positive effect on EI through EA.

4.2. Discussion

ESE has a significant positive effect on EA. This finding aligns with Bandura's Social Cognition Theory framework, which states that self-efficacy directly influences behavioral intention. Individuals with higher self-efficacy tend to have more positive attitudes toward behaviors they believe they can perform successfully. This result generally aligns with the findings in different locations, such as on Indonesian and Chinese students [6, 21, 22]. Based on the EA model used in this study, it was concluded that ESE is the dominant determinant of EA. A high level of self-efficacy is essential for professional pharmacists to develop a positive EA.

ESE has a significant positive effect on EI. This finding aligns with the TPB. According to the TPB, perceived behavioral control, including ESE, has a significant structural relationship with EI, which can be explained by three main factors, choice intention, commitment to entrepreneurship, and nascent entrepreneurship [39]. This result generally align with those of college students in Saudi Arabia [26], Malaysia [27] and in Portugal and the USA [40]. In the context of professional pharmacists, a unique association was found in which ESE is the strongest determinant in this structural model of EI. Though the subjects and settings differ, these results align with those of regarding college students in Bangladesh. This finding highlights the importance of ESE in management and innovation as well [41]. Professional pharmacists differ from the general students who are usually the subjects of EI research, in terms of their characteristics. Pharmacists have a combination of health service orientation and strong business potential [42].

The significant positive effect of EA on EI among professional pharmacists aligns with the TPB, which identifies attitude toward entrepreneurial behavior as one of three primary factors explaining EI [43]. This finding corroborates previous research on Taiwanese college students [15] on South Korean and Vietnamese college students, all of whom established EA as a crucial determinant of EI formation [19]. The variation in the dominant determinants of EI across studies can be attributed to the different contexts in which the research was conducted [6].

Related to the research context, this research is the first comprehensive examination of EI among professional pharmacists in Greater Jakarta based on the TPB. The conceptual framework and context of this study differ from those of previous research. This research model uses EI rather than Entrepreneurial Mindset (EM) as a key variable [6]. This study uses EA as an independent and mediating variable rather than as an independent variable [7]. Unlike previous research on general entrepreneurship, which often found EA to be the most significant factor in the EI model, this study found ESE to be the most dominant determinant of EI in the context of healthcare entrepreneurship. In this EI model, an R-squared value of 0.80 indicates a very strong model fit [30]. This shows that the determinants EE, ESE, and EA are very strong and matter in the formation of EI.

The strength of this novel study lies in its approach to the unique characteristics of healthcare entrepreneurship, which differ from those of general entrepreneurship due to constraints such as dual role complexity and regulatory complexity. Professional pharmacists work in highly regulated environments with strict professional codes that influence entrepreneurial behavior patterns, unlike in general business contexts. In these situations, entrepreneurial decisions prioritize patient outcomes over purely commercial considerations. This is a novel conceptualization of "ethical entrepreneurship" in healthcare settings.

This unique context of "ethical entrepreneurship" requires extends the TPB for Healthcare Professionals. We propose the Healthcare Professional Entrepreneurship Theory (HPET), which extends the traditional TPB by incorporating dual-purpose intentions that address both patient care and business success simultaneously. HPET also considers professional identity salience, which reflects the influence of professional role identity on EA, and integrates ethical constraints and regulatory behavioral control, the latter of which addresses the impact of professional regulation on perceived behavioral control.

These results align with the entrepreneurial marketing concept, specifically the resource-based entrepreneurial intent model. This EI model contains elements of entrepreneurial marketing, including innovative capabilities, management, marketing, financial control, risk-taking, knowledge, skills, and experience. This EI model, as a product, is important to promote to its target market because this EI model could facilitate the growth of MSMEs that support the health sector, such as pharmacies, small laboratories, and home care services (SDGs 8). These findings contribute to fostering innovation (SDGs 9) by enabling pharmaceutical entrepreneurs to create business models that overcome dual-purpose complexity challenges in healthcare entrepreneurship. Furthermore, pharmaceutical entrepreneurs can increase partnership opportunities for pharmacists in telemedicine and home service platforms by utilizing AI-powered medication counseling tools (SDGs 4).

5. MANAGERIAL IMPLICATIONS

In order to promote and improve EI among professional pharmacists in the Greater Jakarta area, it is crucial to enhance the determinants of EE, ESE, and EA through strategies and efforts that can be implemented by individual pharmacist and stakeholders. From a managerial perspective, these determinants can be implemented by promoting and improving specific skills, knowledge and experience, as well as capabilities in areas such as management, innovation, marketing, financial control and risk-taking in healthcare entrepreneurship. This can be supported by adopting AI technology.

At the individual level, the promotion address how professional pharmacists must improve their skills, knowledge, and experience related to healthcare entrepreneurship by developing technology skills through programs such as online courses, certifications, and workshops. Their capabilities must be enhanced by participating in pilot technology projects such as telemedicine, homecare services, patient tracking, digital inventory, and network building. This research provides pharmaceutical universities with insight into how they can adapt the unique nature of healthcare entrepreneurship to their innovative curriculum strategies. These strategies adopt AI through digital labs, VR training, and research collaborations with the pharmaceutical industry.

These findings provide the Indonesian Association of Pharmacists (IAI) with feedback on how to implement professional development strategies. These strategies include digital competency frameworks and certifications, regulatory advocacy strategies such as policy reform and ecosystem building such as innovation hubs. Recommendations for the government as a stakeholder include providing regulatory infrastructure which balancing patient service obligations and business needs. Additionally, the government can improve the innovation capabilities by providing innovation funding and developing the digital market in the health sector. The outcomes of this study directly support the development of AI-powered entrepreneurship assessment tools for healthcare professionals, big data–driven systems for identifying market opportunities, and platforms for forecasting the pharmaceutical industry.

6. CONCLUSION

The promotion and strengthening of EI among professional pharmacists is a crucial strategy for accelerating entrepreneurial growth within Indonesia's pharmacy sector. The findings of this study, grounded in the TPB, align closely with the principles of entrepreneurial marketing, which emphasize identifying and leveraging opportunities based on available resources. These resources include entrepreneurial experience (EE) such as knowledge, skills, and practical exposure as well as ESE in areas like innovativeness, management, marketing, financial control, and risk-taking. The results highlight the importance of adopting a more targeted and structured approach to enhance EI through the EI Model, with a strong emphasis on strengthening ESE among pharmacists.

This approach is particularly relevant for the Greater Jakarta region, which aims to cultivate a new generation of pharmacy professionals capable of driving innovation and entrepreneurial development in the pharmaceutical and broader healthcare sectors. Successful implementation of the EI Model requires coordinated efforts among professional pharmacists, pharmacy education institutions, the Indonesian Association of Pharmacists (IAI), and government stakeholders. Such collaboration ensures that interventions addressing EI are well-designed and effectively integrated across academic training, professional development, and policy initiatives.

Promoting EI within the pharmacy profession should not be viewed solely as a means of fostering business creation, but as a strategic effort to generate innovative and socially impactful solutions for Indonesia's healthcare challenges. Strengthening entrepreneurial capacity can stimulate pharmaceutical innovation, improve medication accessibility, expand care quality, and enhance professional opportunities in the knowledge economy. Future research may further enrich this understanding by exploring additional determinants such as organizational support, digital readiness, or regulatory factors, conducting longitudinal studies to examine changes in EI over time, or applying qualitative methods to uncover deeper insights into pharmacists' motivations and barriers as they transition toward entrepreneurial roles.

7. DECLARATIONS

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7.2. Author Contributions

Conceptualization: SS; Methodology: SS and KK; Software: SS; Validation: SS; Formal Analysis: SS and KK; Investigation: SS and JA; Resources: KK; Writing Original Draft Preparation: SS and KK; Writing Review and Editing: SS and JA; Visualization: SS and KK; All authors, SS, KK, and JA have read and agreed to the published version of the manuscript.

7.3. Data Availability Statement

The data presented in this study are available on request from the corresponding author.

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7.5. Declaration of Conflicting Interest

The authors declare that they have no conflicts of interest, known competing financial interests, or personal relationships that could have influenced the work reported in this paper.

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