

# Do Entrepreneurial Knowledge and Behavior Affect Entrepreneurial Readiness for Students?

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**Abstract.** Entrepreneurial knowledge is the basis for entrepreneurial behavior, impacting students' readiness to improve their skills, experience, and entrepreneurial mindset. This research aims to analyze entrepreneurial knowledge and behavior towards entrepreneurial readiness for students. This research involved students (n=164) from leading campuses, including Universitas Negeri Medan, Universitas Negeri Surabaya, Universitas Negeri Malang, and Universitas Muslim Nusantara Al-Washliyah, who had participated in student entrepreneurship program competitions both internally and externally. They determine the number of samples used in the G\*Power application and the purposive sampling technique. Data analysis used multiple regression. The results show that entrepreneurial knowledge and behavior are adequate in entrepreneurial readiness for students, partially and simultaneously. This research emphasizes the importance of experience through entrepreneurial competitions, which can allow students to apply theory in realistic situations, sharpen their skills, and construct networks. Mentoring programs from practitioners, access to business incubators, and financial and non-financial support from campuses can also encourage students to develop their business ideas. Through this holistic approach, universities prepare students with the essential knowledge and skills an entrepreneurial mindset essential for their success in the business.

**Keywords:** entrepreneurial knowledge, edupreneurship behavior, entrepreneurial readiness

## 1 Introduction

Most entrepreneurship literature focuses on individual characteristics and new venture creation [1]. However, it under-represents the influence of broader systemic factors [2] and how these may affect entrepreneurial performance [3]. This makes individual actions the core focus of the entrepreneurial process, with opportunities considered secondary [4], [5]. A more comprehensive approach is needed to understand how external factors, such as entrepreneurial behavior, government policies, economic conditions, and societal culture, contribute to entrepreneurial success and activity [6]. This is particularly relevant in the context of entrepreneurial readiness for college students, where entrepreneurship education should not

only focus on developing individual skills [7] but also on preparing them to adapt and leverage these external factors [8]. A deep understanding of the context and external environment will help students be better prepared to face challenges and take advantage of opportunities in entrepreneurship [9].

In recent years, entrepreneurship education has seen rapid growth in most industrialized countries [10]. Governments worldwide have introduced various programs to support entrepreneurship in higher education [11]–[13]. Higher education has focused on entrepreneurship due to its significant role in sustainable economic and social development [14], as well as its promotion of creativity and innovation [15]. Entrepreneurship education aims to deepen students' understanding of entrepreneurial concepts, strategies, and practices [16], preparing them to actively engage in entrepreneurial activities in the future [17], [18].

In recent decades, research on entrepreneurship has been in its early stages [19], [20], and entrepreneurship education studies have been exploratory [12], [21]–[23]. This indicates the need for a widely accepted theory in this field. Nevertheless, entrepreneurship's economic and social significance has been acknowledged [24], highlighting the need for a solid theoretical and conceptual foundation, along with empirical research [25].

Numerous studies have demonstrated that students who enroll in entrepreneurship courses tend to possess greater readiness, motivation, knowledge, and skills to engage in entrepreneurial activities [26]–[28]. Additionally, they exhibit entrepreneurial behavior that tends to increase [29]–[31]. However, while there is a significant increase in knowledge and motivation, there is rarely a direct correlation with a real increase in entrepreneurial readiness [16], [32]. Multiple studies support the idea that entrepreneurship education can enhance entrepreneurial knowledge and behavior [33]–[35]. Nevertheless, there are still many empirical studies that have not provided strong and consistent support for the notion that entrepreneurial knowledge and behavior can directly improve entrepreneurial readiness [36], [37]. Therefore, further research is necessary to clarify and explain this concept by considering potential explanations for the observed contradictions [38].

Several theoretical perspectives argue that entrepreneurial knowledge during lectures is the basis for entrepreneurial behavior [29], [31] and has an impact on entrepreneurial readiness for students to improve their skills, experience, and entrepreneurial mindset [39]. Entrepreneurial knowledge covers various aspects of understanding related to business concepts, marketing strategies, financial management, and operational aspects of developing innovative products and services [40]. Meanwhile, entrepreneurial behavior includes initiative, courage to take risks, creativity, and resilience in facing challenges [41]. Through business simulations, case studies, and practical projects, students can improve their knowledge and skills in designing and managing their businesses.

Currently, the implementation of entrepreneurship in higher education has been carried out gradually and continuously through various training programs related to entrepreneurship, such as the Entrepreneurship Internship Program (Program Magang Kewirausahaan/PMK), Student Entrepreneurship Program (Program Mahasiswa Wirausaha/PMW), and Student Creativity Program (Program Kreativitas Mahasiswa/PKM). However, these programs only cover education and knowledge alone and have yet to reach the stage of readiness for entrepreneurship [42]. Students who have participated in various training and creativity activities to increase their entrepreneurial potential often do not continue the business they started after the program ends. This shows that they still need to be fully ready to become entrepreneurs, so an empirical study is needed to answer this problem.

This study examines the relationship and influence of entrepreneurial knowledge and

behavior on entrepreneurial readiness for students. The urgency of this study is to help identify aspects that influence the lack of entrepreneurial readiness among students so that later educational programs can be adjusted to more effectively prepare students by developing more relevant and practical curricula to improve the quality of entrepreneurship education. This study can provide an empirical basis for stakeholders to develop and support more effective entrepreneurship programs in universities to increase the number of successful young entrepreneurs. In addition, this study provides insights and practical recommendations to students on how they can better prepare themselves to become entrepreneurs so that they are better prepared to face challenges and take advantage of opportunities in the business world after graduating from college.

## **1.1 Entrepreneurship Readiness**

Entrepreneurial readiness is essential to encourage entrepreneurial activities [5]. Entrepreneurial readiness includes a series of individual personal characteristics, especially their ability to observe and analyze their environment so that they can channel their creative and productive potential with courage and achieve self-achievement [43], [44]. This shows that entrepreneurial readiness depends on their ability to explore various opportunities and their environment to utilize available resources. Entrepreneurial readiness also depends on a person's mindset toward entrepreneurial activities [39]. Prospective entrepreneurs with a positive mindset toward entrepreneurial activities will feel ready to succeed in their businesses [42].

This study argues that the potential readiness of students to start a business is determined by knowledge, behavior, and entrepreneurial mindset. Entrepreneurship education in higher education has been proven to increase students' innovation, critical analysis, initiative, and independence [45], [46]. Entrepreneurship education in higher education can stimulate entrepreneurial ideas and behavior, prepare students to improvise with the environment, and produce graduates with entrepreneurial character and mentality.

## **1.2 Entrepreneurial Knowledge**

Entrepreneurial knowledge is one of the essential aspects that refers to the conceptual understanding and analysis of various functions and processes of entrepreneurship [47]. Through entrepreneurial knowledge, prospective entrepreneurs can understand, extrapolate, interpret, and apply new information innovatively [48]. This is the core of entrepreneurship.

Various studies have observed entrepreneurial knowledge and tend to emphasize that entrepreneurial knowledge is considered a multifunctional need in establishing a business, such as product, market, organizational, and financial aspects of entrepreneurial activity [49], [50]; opportunity identification, market analysis, planning and financing of new ventures, product design and organization, new market development, operational standardization, expansion strategies, and innovation [51] knowledge of markets, customers, and technology [40] as well as knowledge of marketing, sales, organizational behavior, strategy, commercial development, opportunity evaluation, accounting and finance, creative knowledge, and business planning [52]. Several researchers also highlight the entrepreneurial knowledge related to competitive strategy and analysis, growth management, idea discovery and

development, risk management and rationality, financing, creativity, and public relations [53], [54].

### **1.3 Entrepreneurship Behavior**

Entrepreneurial behavior is a series of actions, attitudes, and decisions individuals make in establishing, managing, and developing new businesses [41]. Entrepreneurial behavior includes various aspects, including innovation, risk-taking, recognizing and exploiting opportunities, and managing available resources [22]. Entrepreneurial behavior also involves adapting to market changes, leading teams, and building networks and relationships that support business development [55]. This is often driven by personal motivation, vision, beliefs, and values held by the entrepreneur [56].

The Theory of Planned Behavior developed by [57] is relevant and provides a strong foundation for understanding entrepreneurial behavior by linking individual intentions and readiness to become entrepreneurs. This theory refers to the intention to carry out a behavior. Positive attitudes towards entrepreneurship, social support from the surrounding environment, and the belief in running a business effectively can increase the intention and readiness to become entrepreneurs. Entrepreneurial behavior reflects individual readiness as a strong predictor of actual actions to start and manage new businesses [36]. Thus, entrepreneurial behavior aims to develop individual readiness for entrepreneurship to facilitate individual understanding and participation in entrepreneurial careers.

## **2 Research Method**

### **2.1 Research Design**

The research uses a quantitative approach with an ex post facto design to analyze the construct of the entrepreneurial readiness model in terms of entrepreneurial knowledge and behavior aspects by explaining the relationship and influence between related variables [58].

### **2.2 Participant**

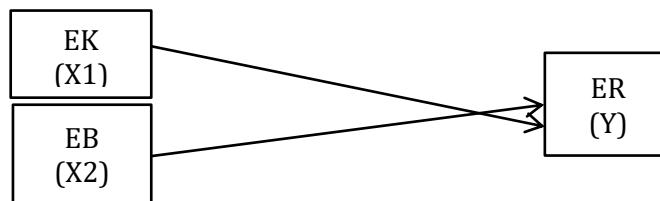
This study involved active students of UNIMED, UNNES, UNM, and UMN Al-Washliyah (n=164). Determination of the number of samples using the G\*Power application with the criteria (1) statistical testing using linear multiple regression; and (2) the type of power analysis using a priori which provides alpha, power, and effect size [59]. The calculation of the number of samples through G\*Power showed a total sample size of 89 respondents. Furthermore, the sampling technique used purposive sampling by considering the criteria of students who had participated in student entrepreneurship program competitions both internally and externally.

## 2.3 Measurement

Data collection utilizes Google Forms for online questionnaire distribution. The measurement instrument uses a questionnaire developed by [60] based on indicators from various literature and research by previous researchers. The questionnaire is compiled using a Likert scale consisting of 5 measurement scales. The question instrument consists of entrepreneurial knowledge (9 items), entrepreneurial behavior (7 items), and entrepreneurial readiness (18 items). These items reflect students' character, behavior, and readiness to start a business.

## 2.4 Analysis

The data analysis technique uses multiple linear regression analysis by utilizing the SPSS software application version 26. This technique is used to identify the influence of independent variables on dependent variables, as well as to determine how much contribution each independent variable makes in predicting dependent variables [58]. To facilitate the visualization of multiple linear regression analysis in this research, Figure 1 is presented below.



**Fig 1.** Research Design Framework

## 3 Results and Discussions

### 3.1 Respondent Demographics

The respondents of this study were active students of UNIMED, UNNES, UNM, and UMN Al-Washliyah who had participated in entrepreneurship program competitions both internally and externally, totaling 164 respondents. Descriptive statistical information and respondent profiles are presented in Tables 1 and 2.

**Table 1.** Statistic Descriptions

Variabel	Mean	Std. Deviation	N
Entrepreneurial Readiness	63.99	10.881	164
Entrepreneurial Knowledge	48.96	8.970	164
Eduprenurship Behavior	40.70	7.299	164

**Table 2.** Respondent Descriptions

<b>Descriptions</b>		<b>Total</b>	<b>Percent</b>
Gender	Male	40	24,39
	Female	124	75,61
Campuses	Universitas Negeri Medan	106	64,63
	Universitas Negeri Surabaya	24	14,63
	Universitas Negeri Malang	16	9,76
	UMN Al-Washliyah	18	10,98
Year of Entry	2019	14	8,54
	2020	30	18,29
	2021	62	37,80
	2022	28	17,07
	2023	30	18,29
Programs	Accounting	15	9,15
	Digital Business	11	6,71
	Entrepreneurship	37	22,56
	Management	14	8,54
	Primary Teacher Education	9	5,49
	Biology Education	12	7,32
	Mathematics Education	10	6,10
	Economics Education	32	19,51
	Office Administration	12	7,32
	Education		
	Physics Education	12	7,32
	Student Creativity Program	52	31,71
	Business Plan Competition	54	32,93
	Student Entrepreneurship	44	26,83
	Development Program		
Entrepreneurship programs that have been/are being implemented	Student Organization	9	5,49
	Strengthening Program		
	Independent Entrepreneurship	5	3,05
	Program		
Year of Entrepreneurship Program Implementation	2020	4	2,43
	2021	16	9,75
	2022	10	6,09
	2023	100	60,97
	2024	34	20,73

Descriptive statistical data shows the mean value and standard deviation for entrepreneurial readiness, entrepreneurial knowledge, and entrepreneurial behavior of (63.99; 10,881), (48.96; 8,970), (40.70; 7,299), respectively. By using the descriptive statistical formula [61], the ideal mean value ( $\text{Ideal Mean} = \text{Ideal Maximum Score}/2$ ) and standard deviation ( $\text{Ideal SD} = \text{Ideal Mean}/3$ ) for entrepreneurial readiness, entrepreneurial knowledge, and entrepreneurial behavior of [38.5; 21.3], [31.5; 16.3], [24.5; 13.5], respectively. The actual mean value for all variables is higher than the ideal mean value, indicating that the respondents' perceptions of all questionnaire items are above average. In addition, the actual standard deviation, which is smaller than the ideal standard deviation, indicates that the data distribution in the sample is well distributed and individual values are close to the average.

Respondent description data shows information that respondents are dominated by women (75.61%), the majority of respondents come from Medan State University (64.63%) and are dominated by students of the 2021 intake (37.80%). The majority of respondents come from entrepreneurship study programs (22.56%) and are dominated by the Business Plan

Competition entrepreneurship program (32.39%), with the most implementation years being implemented in 2023 (60.97). This data reflects a growing trend among students to engage in entrepreneurial activities and is essential to further develop and support the entrepreneurial spirit and skills among students.

**Table 3.** Correlation Value

		<b>Readiness</b>	<b>Knowledge</b>	<b>Behavior</b>
Pearson Correlation	Readiness	1	.726**	.809**
	Knowledge	.726**	1	.789**
	Behavior	.809**	.789**	1
Sig. (1-tailed)	Readiness	.	0,000	0,000
	Knowledge	0,000	.	0,000
	Behavior	0,000	0,000	.

The correlation value data shows that entrepreneurial knowledge has a strong positive relationship with students' readiness to start a new business ( $r = 0.726$ ). Likewise, entrepreneurial behavior has a strong positive relationship with students' readiness to become entrepreneurs ( $r = 0.809$ ). The data shows that increasing entrepreneurial knowledge and behavior among students is essential to encourage students to start new businesses. It also explains that an effective entrepreneurship education program can increase students' readiness and confidence to run their businesses. Therefore, universities must integrate a comprehensive entrepreneurship curriculum and provide practical support to develop students' entrepreneurial skills.

### 3.2 Classical Assumption Test

The normality test results indicate that the data in this study are normally distributed with an Asymp. Sig. (2-tailed) value on the *One-Sample Kolmogorov Smirnov* Test of  $0.200 > 0.05$ , so  $H_0$  is accepted (see Table 4).

**Table 4.** Normality Test

		Unstandardized Residual
N		164
Normal Parameters <sup>a,b</sup>	Mean	,0000000
	Std. Deviation	3,03480192
Most Extreme Differences	Absolute	,064
	Positive	,059
	Negative	-,064
Test Statistic		,064
Asymp. Sig. (2-tailed)		,200 <sup>c,d</sup>

The linearity test data provides information that the two independent variables (EK and EB) have a linear relationship to entrepreneurial readiness with Sig. Deviation from Linearity ( $X1 \leftrightarrow Y$ ) = 0.916, and ( $X2 \leftrightarrow Y$ ) = 0.551. This indicates that there is no significant deviation from linearity between the variables concerned, where increasing entrepreneurial knowledge

and entrepreneurial behavior will consistently increase entrepreneurial readiness in students. In other words, the linear model connecting the variables concerned is linear or valid (see Table 5).

**Table 5.** Linearity Test

		<b>F</b>	<b>Sig</b>
Deviation from Linearity	EK (X1) ↔ ER (Y)	,562	,916
	EB (X1) ↔ ER (Y)	,920	,551

The multicollinearity test result data provides information that the VIF values (X1) and (X2) obtained, namely entrepreneurial knowledge and behavior, are each ( $2.112 < 10$ ). This reflects that there are no symptoms of multicollinearity in the regression model in this study. These data also ensure that the resulting regression parameter estimates will be stable and can be interpreted well (see Table 6).

**Table 6.** Multicollinearity Test

		<b>Collinearity Statistics</b>	
		<b>Tolerance</b>	<b>VIF</b>
Model	Entrepreneurial Knowledge	.474	2.112
	Eduprenurship Behavior	.474	2.112

a. Dependent Variable: Entrepreneurial Readiness

### 3.3 Hypotesis Test

The data from the determination coefficient test results in the Model Summary table show that the correlation coefficient ( $r$ ) value for this model is 0.861 and the determination coefficient value is 0.741. These data provide information that the contribution of entrepreneurial knowledge and behavior is closely and strongly related [62] to entrepreneurial readiness by 74.1% (see Table 7). The remaining 25.9% is explained by other variables not included in this regression model.

**Table 7.** Testing the Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.861 <sup>a</sup>	.741	.738	5.574	1.934

a. Predictors: (Constant), Entrepreneurial Knowledge, Eduprenurship Behavior

b. Dependent Variable: Entrepreneurial Readiness

The ANOVA test result data provides information that simultaneously entrepreneurial knowledge and behavior have a significant effect on entrepreneurial readiness. This is evidenced by the  $F\text{-stat} > F\text{-table}$  ( $230.109 > 3.05$ ) and a significance smaller than alpha ( $0.00 < 0.05$ ) (see Table 8). This means that the higher or better the entrepreneurial knowledge obtained by students and supported by good entrepreneurial behavior, the more it will increase students' readiness to establish their businesses. Because, good knowledge will provide the theoretical basis and skills needed, while good entrepreneurial behavior reflects the attitudes, motivations, and actions needed to manage and run a business. Thus, the combination of both will strengthen students' readiness to face challenges and take opportunities in the world of



entrepreneurship.

**Table 8.** ANOVA Test

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	14296.550	2	7148.275	230.109	.000 <sup>b</sup>
	Residual	5001.426	161	31.065		
	Total	19297.976	163			

a. Dependent Variable: Entrepreneurial Readiness

b. Predictors: (Constant), Entrepreneurial Knowledge, Eduprenurship Behavior

The t-test data provides information that partially entrepreneurial knowledge has a positive and significant effect on entrepreneurial readiness for students with a t-stat (X1) of 8.554 > t-table 1.654 and a significant value of 0.000 < 0.05. Likewise, entrepreneurial behavior partially has a positive and significant effect on entrepreneurial readiness for students with a t-stat (X2) of 7.332 > t-table 1.654 and a significant value of 0.000 < 0.05 (see Table 9). This indicates that the role of entrepreneurial knowledge and behavior is very significant in preparing individuals for entrepreneurship. Improving these two aspects will increase students' readiness and success in starting and managing their businesses.

**Table 9.** The T-test

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	8.430	2.630		3.205	.002
	Entrepreneurial Knowledge	.605	.071	.499	8.554	.000
	Eduprenurship Behavior	.637	.087	.427	7.332	.000

a. Dependent Variable: Entrepreneurial Readiness

### 3.4 The Effect of Entrepreneurial Knowledge on Entrepreneurial Readiness

The t-test results show that partially entrepreneurial knowledge has a positive and significant effect on entrepreneurial readiness for students with a t-stat (X1) of 8.554 > t-table 1.654 and a significant value of 0.000 < 0.05. Entrepreneurial knowledge includes understanding the concepts, strategies, and business skills needed to start and manage a business. It plays a vital role in shaping students' readiness for entrepreneurship by providing a theoretical basis and practical guidance needed in the business world. Knowledge of the basics of entrepreneurship, such as management, marketing, finance, and operations, provides a strong foundation for students to understand how to start and manage a business. This understanding will help students design an effective and sustainable business model. Entrepreneurial knowledge also trains students to see opportunities in the market, identify unmet needs, and develop innovative products or services. This can improve their ability to respond to market dynamics quickly and efficiently. In addition, students with high entrepreneurial knowledge will be able to analyze risks and manage risks to be better prepared to face the uncertainties and challenges that arise in the entrepreneurial process. They can plan

effective risk mitigation strategies, thus minimizing the negative impact on their businesses. Through the knowledge gained from entrepreneurship education and training, students can access a network of mentors, investors, and other professionals who can provide them with guidance and support. This network can later become a valuable resource in developing new businesses. These results align with previous studies that show the importance of entrepreneurial knowledge in shaping entrepreneurial readiness.

Research [5] shows that entrepreneurial knowledge significantly impacts increasing entrepreneurial readiness among students. This study emphasizes that entrepreneurial knowledge can strengthen students' confidence in becoming entrepreneurs, which will later increase their readiness. Furthermore, research by [63] also states that students who acquire entrepreneurial knowledge will be better prepared to start a business because they better understand the risks and how to manage them. This knowledge allows them to make better decisions and be more confident in implementing their business ideas. Furthermore, [64] also strengthen this finding by showing that entrepreneurial knowledge through a well-structured entrepreneurship education program can increase entrepreneurial readiness by increasing understanding of business processes, network development, and access to resources. In addition, [65] in their research in China, also found that entrepreneurial knowledge taught in universities positively correlates with entrepreneurial readiness. Students exposed to entrepreneurship education show increased entrepreneurial intentions and mental readiness to face business challenges. Finally, research by [66] in their study found that skills acquired from entrepreneurial knowledge, such as problem-solving skills, risk management, and innovation, contribute significantly to students' readiness for entrepreneurship.

From these various studies, the results of this t-test strengthen the empirical evidence that entrepreneurial knowledge has a crucial role in improving students' readiness for entrepreneurship and making it an essential element in the higher education curriculum. Comprehensive and practical education equips students with the necessary information and forms attitudes and skills essential for business success.

### **3.5 The Effect of Entrepreneurial Behavior on Entrepreneurial Readiness**

The t-test results show that partially entrepreneurial behavior has a positive and significant effect on entrepreneurial readiness for students with a t-stat ( $X^2$ ) of 7.332 > t-table 1.654 and a significant value of 0.000 < 0.05. Entrepreneurial behavior includes attitudes, actions, and mentalities that support initiative, innovation, and risk-taking in business and play an essential role in shaping students' readiness to start and manage their businesses. Students with good entrepreneurial behavior tend to take the initiative to seek new opportunities and take advantage of them. They will not wait for opportunities to come but actively create them. This will help them to always be more advanced in identifying business opportunities and implementing innovative ideas. Students with good entrepreneurial behavior will dare to take risks and be more prepared to face the uncertainty and challenges that arise. They tend to have a higher tolerance for failure and see it as part of the learning process. This is what makes them more confident and ready to start a business.

Entrepreneurial behavior will encourage students to think creatively and innovatively. They are more likely to find new solutions to problems and create unique products or services. This creativity helps them to differentiate their businesses from competitors and attract customers. In addition, students with high entrepreneurial behavior tend to be resilient and

persistent and can better survive until they succeed. This persistence ensures that they do not give up easily and continue to try to improve and develop their businesses. Furthermore, students with high entrepreneurial behavior tend to be adaptive and better prepared to adjust to change and new conditions. This ability ensures they remain relevant and survive in a dynamic business environment. Students who have good entrepreneurial behavior also tend to be active in building networks with various parties. This network can help them get business partners, investors, and mentors who can accelerate the growth of their businesses. Thus, entrepreneurial behavior is essential for forming entrepreneurial readiness for students.

These results also align with previous empirical studies that show the importance of entrepreneurial behavior in shaping entrepreneurial readiness. Research by [67] found that entrepreneurial behaviors such as proactivity and innovation contribute significantly to entrepreneurial readiness. Students who exhibit these behaviors are more likely to be ready to face business challenges and explore new opportunities. Furthermore, research by [36] shows that entrepreneurial behaviors such as perseverance and creativity also play an essential role in building entrepreneurial readiness. This study shows that education encouraging entrepreneurial behavior can improve entrepreneurial abilities and intentions among students. Research by [68] also strengthens these findings by showing that entrepreneurial behaviors that involve practical experience and team diversity can improve entrepreneurial readiness and performance. Students involved in real projects are better prepared to manage their businesses.

From these various studies, it is clear that the results of this t-test strengthen the empirical evidence that entrepreneurial behavior has a significant effect on entrepreneurial readiness. So, entrepreneurial behavior needs to be encouraged through education and practical experience, which can help improve students' readiness to start a business.

### **3.6 The Effect of Entrepreneurial Knowledge and Entrepreneurial Behavior on Entrepreneurial Readiness**

The results of the ANOVA test provide information that simultaneously entrepreneurial knowledge and behavior have a significant effect on entrepreneurial readiness with a calculated F-stat > F-table of ( $230.109 > 3.05$ ) and a Sig value of ( $0.00 < 0.05$ ). This indicates that entrepreneurial knowledge and behavior simultaneously are practical and significant in increasing entrepreneurial readiness for students. Students with solid knowledge of entrepreneurship are more theoretically prepared to run their businesses. Likewise, students with positive entrepreneurial behavior, such as orientation towards achieving goals, initiative, creativity, resilience to failure, and the ability to take initiative and manage risks, are usually more psychologically and emotionally prepared to start and develop their businesses.

Combining entrepreneurial knowledge and behavior can give students a solid foundation to become successful entrepreneurs. They have a good understanding of how to run a business and the attitudes and skills needed to overcome challenges that may occur on their journey as entrepreneurs. Simultaneously, entrepreneurial knowledge and behavior create a solid foundation to support students' readiness to start a new business. Knowledge provides a theoretical foundation and analytical tools, while entrepreneurial behavior encourages practical action and dynamic adaptation. This combination will provide complementary and essential benefits for entrepreneurial success. These results also align with previous research [69]–[71] which shows the importance of combining entrepreneurial knowledge and behavior.

## 4 Conclusions

The study results indicate that entrepreneurial knowledge and behavior partially and simultaneously have a positive and significant effect on entrepreneurial readiness for students, with a calculated  $t\text{-stat} > t\text{-table}$  and a significance value  $< 0.05$ . Entrepreneurial knowledge includes understanding business concepts, strategies, and skills helps students design effective business models, manage risks, and utilize mentor and professional networks. Entrepreneurial behavior involving initiative, creativity, and adaptation encourages students to identify business opportunities, take risks, and persist in facing challenges. This combination of entrepreneurial knowledge and behavior provides the theoretical foundation and practical actions needed for entrepreneurial success.

This study recommends that entrepreneurship education in higher education should include aspects of knowledge and behavior to equip students with the necessary skills and mindset. Higher education can improve students' readiness for entrepreneurship by integrating a comprehensive entrepreneurship curriculum, including practical learning methods such as genuine business projects and internships and skills training and workshops with practitioners. Establishing business incubators, accelerators, mentor networks, and entrepreneurial communities on campus are also essential to provide additional support. In addition, business competitions and awards are necessary to increase student motivation and readiness, and funding and financial support such as grants and access to investors will facilitate the realization of their business ideas to develop further. Finally, continuous evaluation and development are needed to ensure that the program remains relevant, comprehensive, and effective in equipping students with the knowledge, skills, and experience needed to succeed in business.

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