

Alertness, self-efficacy, and intention: Mediating effects encouraging students entrepreneurship behavior

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ABSTRACT

This study examined the interaction of alertness, self-efficacy, and intention in entrepreneurial behavior. This research departed from the efforts of educational institutions to produce graduates with entrepreneurial profiles. Data was collected through questionnaires distributed to 530 respondents who had taken sharia entrepreneurship classes at a university in Indonesia. The results showed that education positively affected students' alerts and self-efficacy. Alertness and subsequent self-efficacy also positively impact entrepreneurial intention and behavior. Next, the entrepreneurial intention has a positive effect on entrepreneurial behavior. Contradictory findings show entrepreneurship education does not significantly impact entrepreneurial intention, self-efficacy, and behavior. The indirect effect found that the mediating role of alertness, self-efficacy, and purpose could fully bridge the relationship between education and entrepreneurial behavior. The results implied the importance of alertness, self-efficacy, and intention to promote entrepreneurial behavior in educational institutions. The study results highlighted an important message for universities and schools to put more effort into students' self-efficacy, vigilance, and personal intention to maximize learning activities on campus. The action can support the efforts of educational institutions through the entrepreneurship curriculum to increase the profile of alums as entrepreneurs.

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1. INTRODUCTION

Entrepreneurship is essential in creating job opportunities and economic growth. It can alleviate poverty and ultimately give birth to economic development at the micro and macro levels. Therefore, entrepreneurship has significant advantages from the financial and social sides [1]. Entrepreneurship education has the potential to deliver relevant competencies and curricula to sustain young people to develop resilience, independence, innovation, and the ability to recognize opportunities to lead productive and rewarding lives in this new post COVID-19 environment [2]. Management should support entrepreneurial education systemically in improving the institution's ability to produce entrepreneurial alums. The facilitators also need chances to build confidence, knowledge, and capacity to develop practical entrepreneurship education learning experiences relevant to the challenges of students' future lives today.

There are several stages for a person to behave as an entrepreneur toward the surrounding environment by identifying and taking advantage of existing opportunities [3]. Entrepreneurial behavior also requires emotional mechanisms in individuals to understand that a person is skilled enough to perform different tasks and behaviors in a complex environment [4]. The path of formal entrepreneurship education to

the birth of entrepreneurial behavior needs to be explored. The number of socially appointed roles can also lead to the delivery of entrepreneurs. The business orientation of this role model can be in the form of an entrepreneur's family background. It could be that the parents of business performers mainly, were the initiators of the previous business, which endowed their children. It could be someone aware of business opportunities (opportunistic).

Even entrepreneurs can be born from family conditions that are completely far from the world of entrepreneurship (off-the-farm entrepreneur) and guidance from education who then has attended previously formatted entrepreneurship training [5]. Dominantly role models can appear or the result of a combination of roles that may appear in entrepreneurs. Forming character into behavior does not just occur; entrepreneurs adopt stages and role models in different ways and perspectives. However, the creation of new businesses cannot be separated from the existence of certain groups and institutions so that later, individuals will find and decide to develop new industries. Awareness of institutions impacts the creation of a curriculum and environment that supports students, such as; lectures that contain a general introduction to entrepreneurship, both theory and practice, and extracurricular activities with many competitions every year. Some of these activities are useful to facilitate students who will later build themselves an entrepreneurial profile. The curriculum and a positive environment could give students more interest and confidence to produce behavioral outcomes with a business orientation. This orientation considers the positive power of a positive environment as a positive contribution to the growth of new businesses [6].

Entrepreneurship Education focuses more broadly on personal development, mindset, skills, and abilities. Entrepreneurship education concentrates more on setting up a business and being self-employed [7]. Although such strong growth has not been seen in other levels of education, development is underway with the policy pressure exerted on educational institutions worldwide. Today, entrepreneurship education has become essential to industrial and academic policies in many countries [8]. The most crucial factor for interaction with the outside world in the educational environment is the support from campus management, the capacity to build organizational strengths, and clear goals and incentives. Other essential factors include flexible time schedules for students to allow for uninterrupted learning, time allotted for pedagogical discussions between lecturers, time to manage the change process, and individual reflection needed to shape new ways of teaching [9]. Teachers' and colleagues' nature and personal disposition are also critical factors because they require the courage to let go of control when introducing uncertainty and ambiguity into the educational process. A well-functioning teaching team is seen as a requirement, whereas skeptical coworkers are seen as obstacles.

Entrepreneurship education has many goals, one of which is to develop awareness and motivation in students. The view is that training students' understanding must be completed by curriculum approaches and methods that continue to build and vary. Still, in principle, education can embrace talents that may exist through transferring knowledge, providing advice, and appropriate training practices [10]. Organizing entrepreneurship knowledge in the proper delivery helps students measure their ability to build a business and grow and develop the ability to recognize opportunities. Entrepreneurship education has an impact on entrepreneurship intention.

Prior studies have shown that entrepreneurship education affects an individual's intention to start a business [11]. Institutionally, it is supported by the entrepreneurial academic and academic entrepreneur both contribute to succeed the entrepreneurial university [12]. This intention found that the likelihood of becoming an entrepreneur was higher among those who had taken an entrepreneurship course. Entrepreneurship education aims to form the necessary competencies in obtaining employment and develop an entrepreneurial spirit and business initiatives in a rapidly changing economic environment. Entrepreneurship education implies a solid motivation to succeed, an initiative in front of society's fundamental problems, and accountability in risk-taking [1]. And regardless of how the material from the teacher is delivered, it does not have a direct effect. Still, substantially or theoretically, entrepreneurship material can directly impact interest in entrepreneurship [13]. Other studies showed that entrepreneurship education significantly affects entrepreneurial intentions. Intentions greatly determine a person's behavior in achieving goals where there is also a commitment to provide the outcome of behavior. The purpose is a psychological state representing a person's plan about what will be done and is based on achieving the desire [14]–[18].

Alertness in entrepreneurship is associated with identifying and exploiting opportunities [3]. This awareness allows individuals to create a positive image based on predicted future outcomes [19]. To overcome some of these challenges, an idea to place value creation at the heart of entrepreneurship education, such as emphasizing the awareness of seeing and taking opportunities to describe it, will have many varied approaches depending on the context. This approach will provide practical input to faculty and students to create value for external stakeholders as a formal part of the curriculum [9].

Entrepreneurial alertness directly affects entrepreneurial intentions because entrepreneurial alertness develops opportunity recognition and assessment of individual identification with business intentions [20]. There is a suggestion that entrepreneurship awareness positively correlates with entrepreneurial intentions

[21]. Entrepreneurial awareness is considered capable of identifying and exploiting opportunities [22]. The entrepreneurial definition refers to self-confidence to start a new business in the future [23], including determining the formulation of ideas and plans and then creating a new business according to choose [3], [24]. Alertness to entrepreneurship triggering entrepreneurial behavior is an essential part of the entrepreneurial process in starting a new business. When associated with individual motivation, alertness can create awareness among individuals to identify and recognize opportunities to become entrepreneurs [25]. The relationship between entrepreneurial awareness and entrepreneurial intention also shows that a person's entrepreneurial intention with entrepreneurial alertness as a predictor variable positively and significantly influences entrepreneurial choice and has better adaptability [3]. Thus, someone with high alertness is more likely to recognize and take advantage of possibilities to become an entrepreneur.

Environmental factors, vicarious experiences, and social models can influence self-efficacy, which can be barriers and facilitators. Thus, entrepreneurial independence signifies a fundamental emotional mechanism for individuals to understand that they are skilled enough to perform different tasks and behaviors in complex environments [4]. The introduction of entrepreneurship is its capacity to trigger deep learning and instill engagement, excitement, motivation, self-confidence, and a feeling of relevance among students. It also has the stated and, to some extent, proven effects on job creation, economic success, renewal, and innovation for individuals, organizations, and society at large. In addition, many challenges are easy to meet, such as lack of support, time, and resources within the institution, difficulty in assessing teachers and researchers, and confusion of definitions partly due to the absence of a developmental approach. The big challenge faced in changing or reforming new education is the lack of assertiveness, as well as carrying out the learning process to answer questions critically [9]. So, confidence is needed regarding how capable and ready teachers and students are in practicing entrepreneurial values.

In several previous studies [26], [27] entrepreneurial self-efficacy is positively related to entrepreneurial intentions. The literature suggests that entrepreneurial self-efficacy is positively associated with forming entrepreneurial intentions [28]. Experience and past behavior can influence future entrepreneurial choices and actions by increasing entrepreneurial self-efficacy to become entrepreneurs in the future [29]. Experience must also be supported by knowing entrepreneurial efforts to be more successful. Therefore, someone with a high level of self-efficacy tends to react more positively to every condition than someone with low self-efficacy, who will tend to be hesitant about a new environment [30], [31].

The high level of optimism associated with self-efficacy further broadens the outcome of entrepreneurial behavior. In particular, Zhao *et al.* [30] has a constructive impact on looking at prospects, implementing new projects, and the inherent entrepreneurial tasks. Entrepreneurs with high self-confidence in their abilities for a particular business are likelier to allow someone to follow and continue these activities than entrepreneurs with lower self-efficacy [32]. Therefore, someone with a higher level of self-efficacy triggers to create a new business. Entrepreneurship intends to formulate a new business and choose an alternative career for general work [33]. Several authors suggest that intention is the best predictor to measure entrepreneurial behavior [34]. Previous researchers found that individuals with high entrepreneurial intentions positively and significantly affect entrepreneurial behavior [23]. In the past three decades, many studies investigated the influence of entrepreneurial spirit in predicting entrepreneurial intention and orientation. The effect of entrepreneurial spirit with the impact of entrepreneurial alertness, entrepreneurial independence, and proactive personality on entrepreneurial behavior has been given limited attention in the literature. Therefore, to address this gap, we have tried to measure the relationship between intention and conduct to describe their relationship and contribute more to the existing entrepreneurship literature [35]. Looking into the current literature, we find that intention does not necessarily lead to the formation of entrepreneurial action in a conceptual model of the intention-behavior gap in the entrepreneurial field [23]. Some scholars found that in conceptualizing the intention and behavior model, entrepreneurial intention explained no more than 30% of the variance in entrepreneurial actions [36].

Ajzen [34] introduced the theory of planned behavior (TPB) as a form of development of the previously developed theory of reasoning. TPB is the cause of a person to take specific actions implemented in several fields, including economics, health, and human resources. Especially in human recognition, Krueger and Casey [37] defined entrepreneurial behavior as a planned action. This behavior demands a relationship between personal influence and interest in entrepreneurship, and TPB is considered better and more complete in explaining and predicting entrepreneurial interest or starting a business [38]. The theory of planned behavior defines intention as an individual's beliefs and perceptions about the behavior of a particular behavior. Some experts argue that entrepreneurial intentions ultimately lead to entrepreneurial behavior [33], [36]. However, a recent study stated that entrepreneurial intention was the strongest predictor of entrepreneurial behavior. Entrepreneurs need an individual commitment to translating entrepreneurial intentions into entrepreneurial behavior. In addition, previous researchers described entrepreneurial behavior as the practice of entrepreneurial behavior as an understanding of entrepreneurial intentions and that

entrepreneurship contributes to entrepreneurial intentions and behavior [32].

2. RESEARCH METHOD

This study obtained 530 respondents from 13 parallel classes of Sharia Entrepreneurship courses in the odd semester of 2021/2022. The questionnaire contents are related to the respondent's identity, family background, and ownership of a start-up business. The questionnaire included answers to each statement item using a 7 Likert scale from point 1, which means "strongly disagree," to 7 points which means "strongly agree." The entrepreneurship education measurement scale refers to Purwana *et al.* [18], which has 8 statement items. The statement items included "My lecturer taught me about entrepreneurship" and "Entrepreneurship education on-campus supports students to become entrepreneurs." This scale for measuring entrepreneurship alertness came from Tang *et al.* [21]. The ranking includes thirteen constructs divided into three dimensions: scanning and searching, association connection and evaluation, and appraisal.

A sample item for scanning and searching is "I always pay attention to new business ideas when looking for information." "I'm good at connecting the dots for association with connections." For evaluation and assessment: "When faced with many opportunities, I can choose the good ones." and "In college, I have learned the importance of learning about entrepreneurship." While entrepreneurial self-efficacy was measured using a four-item scale developed by Zhao *et al.* [30], the statements were: "I believe that I can successfully find new business opportunities." The entrepreneurial intention was measured using five measurement constructs developed by Liñán and Chen [39]. An example of an entrepreneurial intention statement is, "I am willing to do anything to evolve into an entrepreneur." Entrepreneurial behavior was measured using a 10-item scale. This study adapts measurement from the Global Entrepreneurship Monitor (GEM)'s constructs and the panel study of entrepreneurship dynamics (PSED), which develop a series of initial activities on entrepreneurial behavior. Entrepreneurship intends to adopt ten measurement construction scales from Shirokova *et al.* [36]. The sample item is "I have bought materials, tools, or machinery for this company."

3. RESULTS

The undergraduate program in the management program of Universitas Islam Indonesia aims to produce alumni, one of them with an entrepreneurs profile. As a result of the COVID-19 pandemic conditions in the odd semester of 2021/2022. Learning uses the classical method of exposure continues with discussion sessions, online quizzes, also students' presentations in several meetings. At least two days before the synchronous face-to-face, the lecturer has prepared lecture materials with e-books at the beginning of the semester and lesson materials in PDF format and learning videos. Ensuring students have studied the material uploaded every week, lecturers applied an online quiz for each session. For assignments, students make small groups with three to five members to make value proposition canvas (VPC) and business model canvas (BMC) assignments in stages and present them at the end of class. This research obtained 530 respondents from 780 students who voluntarily filled out this research questionnaire.

3.1. Profile of respondents

In every odd semester or allocation for the fifth semester, students must take sharia entrepreneurship courses. Based in the Tabel 1, the findings reveal that the composition of respondents based on gender is almost equal, as amount 257 respondents (48.5%) were male and 51.5% were female. The questionnaire asked respondents about their family background. The results in Table 1 shows that as many as 240 respondents (45.3%) had a business family background, 69 respondents had their own start-up business (13%), and students who did not have a business family background and did not have a start-up business were 221 respondents or 41.7%. Next, 309 students (58.3%) with a business background answered that their business runs in three majority categories: i) 141 or 45.6% in culinary; ii) 104 or 33.7% in fashion; and iii) 16 or 5.2% in the architecture field. The details of each business categories can be seen in Table 2.

Table 1. Demographic respondent

	Frequency	Percentage
Gender		
Male	257	48.5
Female	273	51.5
Background		
Business Family	240	45.3
Own start-up	69	13.0
None above	221	41.7

Table 2. Business categories

	Frequency	Percentage
Culinary	141	45.6
Fashion	104	33.7
Handcraft	5	1.6
TV & radio	3	1.0
Publishing	1	0.3
Architecture	16	5.2
Apps & games developer	3	1.0
Advertising	8	2.6
Music	2	0.6
Fotography	5	1.6
Film/animation/video	3	1.0
Show	11	3.6
Interior design	6	1.9
Com-visual design	1	0.3
Total	309	100

*Data come from only students who have business family and own start-up background (309 respondents)

3.2. Outer model

We analyzed the outer model to investigate the dependability and validity of the indicator instruments [40]. The convergent validity of each device was measured using loading factors. Based on the rule of thumb, all the loading factors had to be greater than 0.7 [33]. Another inner model analysis to measure validity is discriminant validity. We examined the discriminant validity of each instrument by comparing the square root of average variance extracted (AVE) values of each construct and other constructs if AVE root correlations were more outstanding than 0.7 and further. The convergent validity results above show that all indicators that refer to statement items have represented each variable with a loading factor value of >0.7. Based on Table 3, the value of each statement item for all variables has a more significant cross-loading effect for each variable in comparing the variables on each item supporting the constructs they represent, so each variable meets the requirements for further research. The complete result is shown in Figure 1 and Table 3 in describing cross loading factors such as entrepreneurial alertness (EAlert), entrepreneurial behavioral (EBehav), entrepreneurial education (EEdu), entrepreneurial intention (EIntent) and entrepreneurial self-efficacy (ESelf).

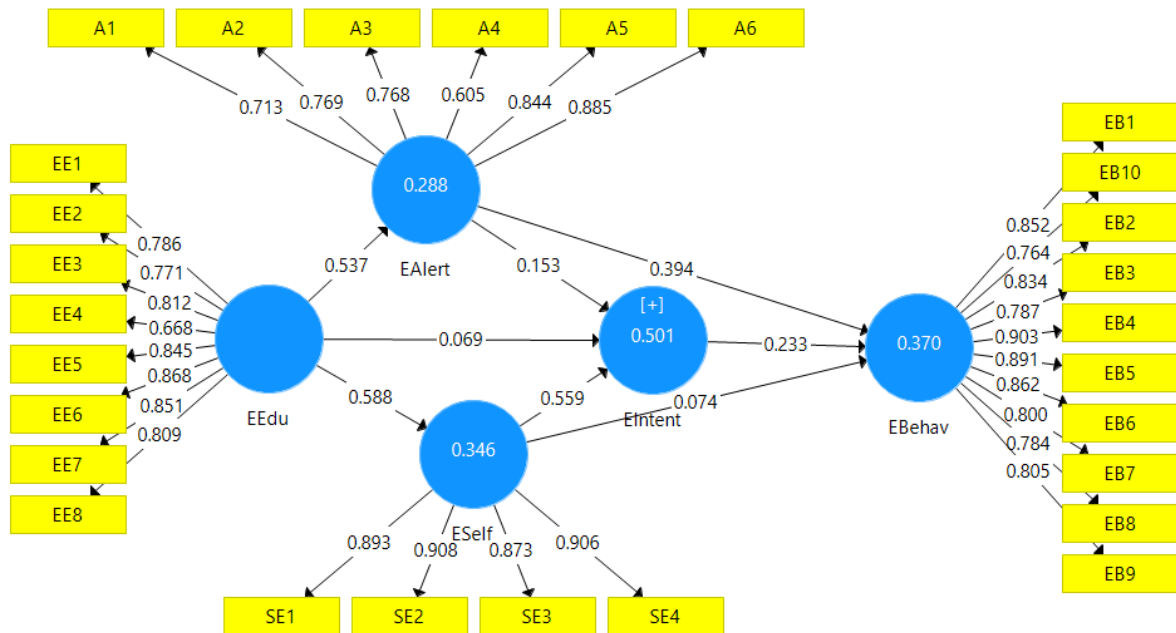


Figure 1. Outer model measurement result

Table 3. Cross loading factors

	EAlert	EBehav	EEdu	EIntent	ESelf
A1	0.713	0.413	0.378	0.359	0.405
A2	0.769	0.438	0.519	0.536	0.584
A3	0.768	0.499	0.415	0.380	0.444
A4	0.605	0.231	0.298	0.301	0.311
A5	0.844	0.451	0.359	0.374	0.451
A6	0.885	0.498	0.459	0.433	0.517
EB1	0.503	0.852	0.292	0.440	0.381
EB10	0.426	0.764	0.280	0.524	0.452
EB2	0.589	0.834	0.365	0.529	0.453
EB3	0.466	0.787	0.322	0.464	0.480
EB4	0.473	0.903	0.254	0.379	0.380
EB5	0.448	0.891	0.233	0.360	0.350
EB6	0.424	0.862	0.228	0.300	0.333
EB7	0.433	0.800	0.277	0.321	0.359
EB8	0.383	0.784	0.229	0.252	0.275
EB9	0.434	0.805	0.254	0.389	0.376
EE1	0.404	0.216	0.786	0.311	0.432
EE2	0.434	0.334	0.771	0.522	0.540
EE3	0.379	0.204	0.812	0.321	0.442
EE4	0.321	0.179	0.668	0.271	0.368
EE5	0.448	0.293	0.845	0.404	0.476
EE6	0.490	0.339	0.868	0.415	0.494
EE7	0.507	0.337	0.851	0.412	0.499
EE8	0.432	0.210	0.809	0.373	0.493
EI1	0.520	0.464	0.433	0.823	0.626
EI2	0.434	0.410	0.383	0.886	0.589
EI3	0.449	0.426	0.436	0.880	0.628
EI4	0.452	0.405	0.423	0.887	0.592
EI5	0.438	0.436	0.419	0.890	0.581
SE1	0.543	0.403	0.529	0.628	0.893
SE2	0.519	0.439	0.500	0.622	0.908
SE3	0.529	0.388	0.524	0.569	0.873
SE4	0.561	0.456	0.551	0.656	0.906

Measurement of discriminant validity using the cross-loading value and the AVE value. The results of the AVE test findings indicate that the AVE value generated by each variable used is more significant than 0.5. So, it can be said to meet the requirements according to Table 4, which shows that it has crossed the limit of 0.5. The results of the cross-loading output are shown in Table 4.

Table 4. Reliability and validity construct

	Cronbach's alpha	rho_A	Composite reliability	Average variance extracted (AVE)
EAlert	0.859	0.875	0.896	0.592
EBehav	0.949	0.954	0.956	0.688
EEdu	0.921	0.927	0.935	0.645
EIntent	0.922	0.922	0.942	0.763
ESelf	0.917	0.919	0.942	0.801

Based on the results in Table 4, it is known that the AVE value of all variables is more than 0.5, with the lowest being the entrepreneurial alertness (EAlert) variable of 0.592 to the highest value owned by entrepreneurial self-efficacy of 0.801. The result shows that each variable has good discriminant validity. The resulting composite reliability (CR) value appears to be >0.8 , where the lowest CR value is 0.896 for the entrepreneurial alert variable, and the highest is 0.956 for entrepreneurial behavior. Overall, all variables indicate the reliability is accepted.

Table 5 shows the collinearity statistics (VIF) results to see the multicollinearity test. The results of the inner values of the variables EAlert, EEdu, ESelf against EBehav and EIntent are $VIF < 5$, so it does not violate the multicollinearity assumption test with a VIF value of 1.626 to 2.255 which, where the overall VIF value is < 5 . The path coefficient test will show how strong the influence of the independent variable is on the dependent variable. Table 5 presents the details of VIF results.

Table 5. Structural model (inner model)

	EBehav	EIntent
EAlert	1.626	1.703
EEdu		1.662
EIntent	1.993	
ESelf	2.255	1.852

3.3. Inner model

Based on the inner model schema that has been shown in the figure and also in the path coefficient table, it can offer the following effects that seen in Table 6. The table shows that the most significant influence is shown in the impact of entrepreneurial education on entrepreneurial self-efficacy with a t-value of 18.412, followed by the effect of entrepreneurial education on entrepreneurial alertness of 16.869 and entrepreneurial self-efficacy on the entrepreneurial intention with a t-value of 11.351. While the smallest influence value is shown in the influence of entrepreneurial self-efficacy on entrepreneurial behavior with a t-value of 1.189 and the effect of entrepreneurial education on entrepreneurial intention of 1.650. If you look at the P values, it can be seen that there are two insignificant effects from the many direct effects studied. The result is seen in the impact of self-efficacy on entrepreneurial behavior and the impact of entrepreneurial education on entrepreneurial intention, which have p values of 0.100 and 0.235, whose p-values are more significant than 0.05; and p values <1.96 (1.650 and 1.189) which indicates that these two effects are not significant. The indirect effects can be seen in Table 7.

Table 6. Hypotheses test – direct effects

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T Statistics (O/STDEV)	P Values
EAlert -> EBehav	0.394	0.394	0.049	8.090	0.000
EAlert -> EIntent	0.153	0.152	0.046	3.332	0.001
EEdu -> EAlert	0.537	0.537	0.032	16.869	0.000
EEdu -> EIntent	0.069	0.073	0.042	1.650	0.100
EEdu -> ESelf	0.588	0.590	0.032	18.412	0.000
EIntent -> EBehav	0.233	0.230	0.061	3.815	0.000
ESelf -> EBehav	0.074	0.077	0.062	1.189	0.235
ESelf -> EIntent	0.559	0.558	0.049	11.351	0.000

Table 7. Hypotheses test – indirect effects

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T Statistics (O/STDEV)	P Values
EAlert -> EBehav	0.036	0.035	0.014	2.625	0.009
EEdu -> EBehav	0.367	0.368	0.026	14.370	0.000
EEdu -> EIntent	0.411	0.411	0.032	13.035	0.000
ESelf -> EBehav	0.130	0.128	0.036	3.589	0.000

4. DISCUSSION

This research has extended a discussion of theoretical and practical implications for further contribution to the designated field. A positive and significant effect between EEdu, EAlert, and ESelf supported the prior finding that showed similar results on the proposed model [1], [10]–[13]. While the effect of EEdu on EIntent has contradictory results to previous studies [14]–[18]. The effect of EIntent also has a positive and significant impact. EBehav also supports previous research [32], [33], [36]. On the other hand, the positive and significant influence of ESelf on EIntent adds to the list of support for prior studies [26], [28], [29]. However, this study found contradictory results with previous studies ([30], [32] that ESelf had no significant effect on EBehav.

This study found that the indirect effect of entrepreneurial intentions had a significant role as a mediator. Entrepreneurial intention can mediate the influence of entrepreneurship education, entrepreneurial vigilance, and entrepreneurial self-efficacy on the formation of entrepreneurial behavior. Compared with the t statistical value in Table 7, the effect of entrepreneurial self-efficacy on entrepreneurial behavior mediated by entrepreneurial intention is 3.589; this value is greater than the direct effect (Table 6), namely 1.189. Although the result of mediating entrepreneurial intentions on the impact of entrepreneurial awareness on entrepreneurial behavior is 2.625 and not more significant than the direct effect of 8.090, the mediating effect is still significant because the t statistic is >1.96 and the p-value is 0.009<0.05. While entrepreneurial intention also acts as a good mediator of entrepreneurship education on entrepreneurial behavior with

a t statistic of 14.370 and a p-value of 0.000, this indicates the hypothesis that the effect of entrepreneurial intention significantly mediates the indirect impact of entrepreneurship education on entrepreneurial behavior.

In addition, there is also a mediating role of entrepreneurial alertness and entrepreneurial self-efficacy on the indirect effect of entrepreneurial education on entrepreneurial intention of 13.035, which the direct impact is not significant with a t statistic of $1.650 < 1.96$. The results show that the two variables, alertness, and self-efficacy, fully mediate entrepreneurship education's effect on entrepreneurial intention.

5. CONCLUSION

To create a process entrepreneurship profile at a higher education level, we initiated this research to analyze the relationship between entrepreneurial education, alertness, self-efficacy, intention, and behavior. The results concluded that education significantly and positively affects alertness and self-efficacy. Similarly, alertness and self-perception also mainly and positively affects intention. Similar conditions of alertness have positive and significant effects on behavior and intention. In addition, results show that alertness, self-efficacy, and intention fully mediate the positive relationship between education and behavior. Although there was no significant effect of education on intention, so did having self-efficacy will lead on behavior.

These findings emphasized the importance of alertness and self-efficacy can trigger entrepreneurial behavior. Although entrepreneurship education is compulsory for management program students, it must also be supported by self-awareness, confidence, and inclination, which will eventually move a person to have entrepreneurial behavior. Although this research contributed to the findings, linking education, alertness, self-efficacy, intention, and behavior should be developed to enrich knowledge management's theoretical development and continuously create entrepreneurship behavior.

This study was conducted only in one higher education institution, not allowing the results of this study to be generalized. Alertness, self-efficacy, and other factors could encourage the impact of education on intention. Likewise, entrepreneurial behavior is likely to be born from the many interrelated antecedents that cannot stand alone. The mediation effect of intention, alertness, and self-efficacy on students' entrepreneurial behavior may strengthen entrepreneurship education given to students. Therefore, it is necessary to identify the features and communication processes that support education, thus helping university administrators to generate alumni profiles as entrepreneurs.

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