

The linkage between economic literacy and students' intention of starting business: The mediating role of entrepreneurial alertness

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Abstract

PURPOSE: Enhancing the number of entrepreneurs is a major study to combat economic and social problems. Psychological factors considered as effective stimulants for entrepreneurial behavior have attracted many researchers in the last decade. The purpose of this research attempts to examine how the influence of economic literacy can promote the intention of starting a new business among students and explore the role of entrepreneurial alertness in mediating this relationship. **METHODOLOGY:** The research adopted a quantitative approach in which hypotheses were statistically estimated using partial least square structural equation modeling (PLS-SEM) based on survey data using a self-administered questionnaire (n=450) from several universities in Indonesia. **FINDINGS:** The analysis indicates that economic literacy has a significant effect on students' entrepreneurial alertness and intention to start a new business. Indeed, entrepreneurial alertness can mediate the relationship between economic literacy and the intention of starting a new business. However, among entrepreneurial alertness dimensions, scanning and search failed in determining the students' intention of starting a new business. **IMPLICATIONS:** The result of this research can provide insight into the literature on the entrepreneurship theme and policymakers

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concerned with delivering new business creation. Besides, educational institutions can consider the matter of economic literacy to be part of their curricula in order to foster the students' intention of starting a business. In addition, economic literacy also needs to be associated with examples relevant to entrepreneurial activities, especially in production, distribution, and online marketing. **ORIGINALITY AND VALUE:** The interesting findings of this paper serve as a reminder that entrepreneurial alertness is one of the predictor variables and mediators for raising the students' intention. This implies that entrepreneurial alertness can be enhanced by economic literacy, as well as how they need to be used to improve course curriculum and the teaching pedagogy. Furthermore, educational institutions could provide business internship programs and entrepreneurship incubators to raise the students' intention of starting business.

Keywords: economic literacy, entrepreneurial alertness, intention, starting business

INTRODUCTION

Entrepreneurship remarkably contributes to economic development in many countries (Pradhan et al., 2020). The essential of entrepreneurial involvement can be proxied by creating new small and medium business scale (SMEs) that can be a win-win solution for the poverty problem, social issue, and developing economies (Lee et al., 2022; Sohu et al., 2022). Providing more SMEs by enhancing entrepreneurs can have benefits for creating new job opportunities, which in turn drives economic welfare (Osei & Zhuang, 2020; Liu et al., 2021). Entrepreneurship is considered synonymous with self-employment and is therefore seen as an appropriate strategy for addressing issues such as employability, especially among young people. Therefore, enhancing the intention of starting a business among students is considered as promising potential business creation.

In the last decade, the studies on entrepreneurial intention and new business creation have been enormous. There is an extending interest in exploring the psychological factors for predicting an increase of entrepreneurial intentions (Neneh, 2019; Ward et al., 2019; Doanh, 2021). In those studies, the theory of planned behavior (TPB) has been involved as a strong reference to explain how psychological factors are predictors of entrepreneurial intentions and behavior. In addition to investigating psychological factors, some consensus is in agreement that entrepreneurship education is a major consideration in driving students' intention for business (Hassan et al., 2021; Mukhtar et al., 2021). However, predicting intention for entrepreneurship from the perspective of economics is often overlooked among scholars (Suratno et al., 2021). Understanding the basic concept of economics can help individuals or students make a decision, including determining their choice of a job after graduation.

Economic literacy enables students to acknowledge and involve basic economic terms and the way of thinking to raise and gain prosperity (Reichert-Schlx et al., 2022). Economic literacy is pivotal to raising knowledge about the costs or benefits of an item in economic and business activity (Jappelli, 2010). A recent study by James and Sahid (2022) remarked that the role of economic literacy could be a basis for students to make a decision, including entrepreneurial career intention. In addition to economic literacy, this research also engages entrepreneurial alertness, which is often missing from Indonesian research, to explain the intention of initiating a new business. The interconnectedness of these two matters is that entrepreneurial alertness covers the individuals' ability to know and raise opportunities and economic literacy also deals with trade-offs and opportunities, which in turn can foster the intention of starting a new business (Neneh, 2019; Li et al., 2020).

The primary goal of this research is to fill an under-addressed gap in the existing literature by identifying whether or not economic literacy can predict students' intention for entrepreneurship in Indonesia. The study in Indonesia is unique because, culturally, Indonesia has a mindset that being a civil servant is more promising than being an entrepreneur, and this produces an insufficient number of new business creations (Wahyono et al., 2021). Moreover, the mediating role of entrepreneurial alertness is also performed in this present research. This study offers insight into both literatures on the entrepreneurship theme and government policymakers that are concerned with providing new business creation from university graduates. This study provides hypotheses to comprehend the linkage between variables and presents evidence from the context of Indonesia for the relationship between economic literacy, entrepreneurial alertness, and intention to start a new business.

This paper is outlined as follows. Section one focuses on the issues and background of the research. Section two concerns the literature review, accompanied by methods used in Section three. Section four presents the finding and discussion of the study, while a conclusion is provided in Section five.

LITERATURE REVIEW

Entrepreneurial alertness and economic literacy

Entrepreneurial alertness is a topic of concern for scholars in the field of entrepreneurship (Tang et al., 2021; Lanivich et al., 2022). Entrepreneurial alertness is defined as the process and action linked with looking for opportunities based on prior knowledge. A preliminary literature also noted

that entrepreneurial alertness includes creative and innovative action in discovering opportunities (Lu & Wang, 2018). This remarks that previous economic understanding or economic literacy obtained from the classes will potentially affect entrepreneurial alertness. Economic literacy is a set of knowledge, basic economic principles, and their practice in regulating the economy, which is obtained through the learning process in the classroom (Setiawan et al., 2020). Economic literacy, obtained through theory and practice in the teaching and learning process, is expected to raise students' entrepreneurial alertness and escalate the intentions of initiating a new business (Cameron & Lim, 2019).

Some scholars documented that entrepreneurial alertness is proxied by three alert activities: alert scanning and search, association and connection, evaluation and judgment (Pirhadi et al., 2021; Pratomo & Wardani, 2021). Alert scanning and search enable individuals to search and explore new unique ideas based on relevant information and knowledge they have obtained (Sasseti et al., 2022). This information and knowledge can be accomplished both from schools during economics classes and open sources of information. This scanning and search dimension will help develop the cognitive process of students that can further impact the intention (Levasseur et al., 2020). A prior study mentioned that the dimension of scanning and search is the accruing experience and learning for a particular domain (Sasseti et al., 2022). Since the content of entrepreneurship and economics are dynamic, it will benefit from alert scanning and search (Pirhadi et al., 2021).

In addition to alert scanning and search, another dimension of entrepreneurial alertness that affects the intention of starting a new business is association and connection. Association and connection are concerned with obtaining information and providing a link to the existing condition (Fatoki & Oni, 2015). Association enables students to make a decision within several choices and provides unconventional connections (Liang, 2019). This statement is in agreement with the purpose of economic literacy, which aims to help an individual to make a rational economic decision by considering cost and benefit analysis (Lusardi, 2019). Some scholars revealed that association and connection also recall prior knowledge from the cognitive process (Fatoki & Oni, 2015; Sasseti et al., 2022). It indicates that economic literacy plays a great role in raising alert association and connection.

Lastly, the dimension of entrepreneurial alertness that has nexus between economic literacy and the intention of starting a business is evaluation and judgment. The business intention is a willingness that incorporates individuals to create a business (Rasli et al., 2013), and it requires an evaluation and judgment process. Setiawan et al. (2020) stated that economic literacy helps students with the evaluation and judgment stages of providing business

ideas. Therefore, it is argued that economic literacy has a link with alert evaluation and judgment, which in turn affects their intention. This relation is confirmed by some scholars who remarked that there is a positive effect on entrepreneurial intentions (Rastiti et al., 2021; Rizqi et al., 2022). The primary rationale is that economic literacy covers people's skills and capabilities that can be adopted in economic activities and decision-making processes. In addition, having economic literacy will encourage students to seek out the solution to complex economic problems and can apply the theory obtained to solve problems (Nurjanah et al., 2018; Suratno et al., 2021). Thus, the hypotheses are provided as follows.

H1: Economic literacy positively impacts the intention of starting new business.

H2: Economic literacy positively impacts scanning and search.

H3: Economic literacy positively impacts association and connection.

H4: Economic literacy positively impacts evaluation and judgment.

Economic literacy, entrepreneurial alertness, and intention of starting new business

The study of economic literacy has developed significantly to date and it has raised attention among academicians and policy researchers. The National Council for Economic Education (NCEE) provided 20 standards that mention what students should understand at high school or college level. To measure economic literacy, there is a test that can be tested related to economic literacy. In addition, Walstad et al. (2013) suggested that there was a revision of the fourth edition of the economic literacy test (Test of Economic Literacy, TEL). The economic literacy test is a nationally standardized and normed economic estimate of student understanding in high schools in the United States. In addition to asking about a basic understanding of economics, it turns out that the scope of economic literacy is very broad (Lusardi, 2019).

The practice of preparing a business plan with classmates is forecasted to foster students' intention to start a new business. Through the economic theories obtained, students are prepared to face risks and from the possibility of failure in running a business. Therefore, economic literacy will enable students to deal with the business opportunities that exist in the surrounding environment, dare to plan, and increasingly intend to open a business. Another study found that economic literacy contributes to the level of intention of digital businesses start-ups (Suparno et al., 2020). In addition to raising the intention of starting a new business, economic literacy can also be linked with entrepreneurial alertness. As mentioned previously, economic

literacy concerns the basic concept of economics, which can be a basis for students' knowledge and information on entrepreneurship (Lusardi, 2019).

Entrepreneurial alertness enables individuals to take advantage of information that is available to create entrepreneurial opportunities through association and connection capabilities followed by the evaluation process (Fatoki & Oni, 2015). The study conducted by Uy et al. (2015) and Obschonka et al. (2017) noted the mediating role of entrepreneurial alertness, whose dimensions are scanning and search, association and connection and evaluation and judgment. This is very logical, considering that entrepreneurial alertness is an important skill that entrepreneurs must have to be successful in establishing a new business. The ability to search and sort, classify and link various opportunities, and evaluate and decide which opportunities to choose, are skills that not only support but also increase the intention of entrepreneurs to set up new businesses (Sasseti et al., 2022).

The economic and entrepreneurship literature notes that entrepreneurial alertness is the entrepreneurial capability to spot opportunities that are not visible to others, and these opportunities are obtained without having to conduct a search (Kirzner, 1979). Furthermore, a study has noted that entrepreneurial alertness can be increased by having a supportive and friendly environment (Fatoki & Kim, 2015). At the initial stage, an entrepreneur needs to find all information required (scanning and search) to minimize business risks. If entrepreneurial alertness is high, they will also have high entrepreneurial intentions (Sasseti et al., 2022). Furthermore, identification of opportunities is further evaluated and considered (evaluation and judgment), through a process of conscious cognitive ability with individual awareness of the surrounding environment and previous economic literacy (Fatoki & Kim, 2015). Therefore, the hypotheses are presented as follows.

H5: Scanning and search positively impact the intention of starting a new business.

H6: Association and connection positively impact the intention of starting a new business.

H7: Evaluation and judgment positively impact the intention of starting a new business

H8: Association and connection mediate the impact of economic literacy and the intention of starting a new business.

H9: Evaluation and judgment mediate the impact of economic literacy and the intention of starting a new business.

H10: Scanning and search mediate the impact of economic literacy and the intention of starting a new business.

METHODOLOGY

Study design

This present research involved a cross-sectional survey with a quantitative approach with partial least square structural equation modeling (PLS-SEM) in justifying the conceptual framework and proposed hypothesis. In particular, this study confirms how economic literacy affects the intention of starting a new business among Indonesian university students and examines the role of entrepreneurial alertness as a mediating variable. This study was conducted in selected universities in Indonesia, including Jakarta, Semarang, and Malang. The locations were selected because these cities are the destinations for students taking up a university education. Also, Malang and Semarang are famous for their rapidly growing tourism business sector, as well as local government support in an effort to increase the number of new entrepreneurs, while Jakarta is the capital city in Indonesia. In addition, the research model in this paper is provided in Figure 1. From the figure, it can be explained that the research model is formed from preliminary papers and relevant underpinning theories.

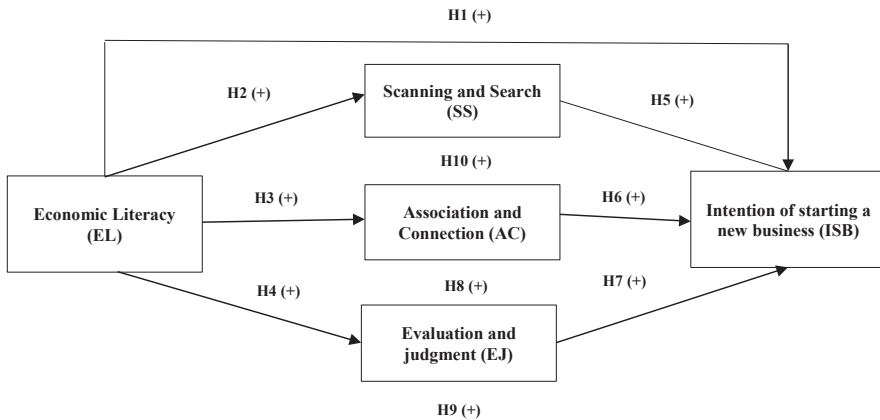


Figure 1. The research model

Source: Modified from Lin et al. (2017); Walstad and Robson (1997); Suratno et al. (2021); Tang et al. (2012).

Data collection

For this research, a convenience sample of 450 university students in Jakarta, Semarang and Malang of Indonesia was employed to represent the intention of starting a new business. This sampling method was chosen because the sampling frame is unavailability and due to its relative speed

and ease. However, care was taken to avoid bias in acquaintance with the sampling approach. The data collection process was initiated by distributing online questionnaires in Google Forms to respondents using students' email addresses and WhatsApp, with the students being asked to complete the questionnaires voluntarily. At the initial stage, we distributed 450 online questionnaires to the respondents, and we collected back these questionnaires for further analysis. During this process, we removed approximately 39 incomplete questionnaires and outliers, which were determined using SPSS. At this stage, we had a 91.33 percent response rate, which is a good response. The study was performed during January and May 2022, and it was followed up two weeks later. The criteria of respondents in this research were students who have attended entrepreneurship education and economic education, and were actively involved in entrepreneurial activities organized by their campuses, to acknowledge their previous experience and understanding of economics and entrepreneurship.

Variable measurement and data analysis

Figure 1 explains that the model is guided by the conceptual research. It was generated through relevant literature and some prior studies. The intention of starting a new business (ISB) that is involved in this study was adapted from Lin et al. (2017), while economic literacy (EL) was performed using indicators from Walstad and Robson (1997). Furthermore, entrepreneurial alertness employed in this research was modified instruments from Tang et al. (2012). In detail, it covers the dimensions of scanning and search (SS) in as many as nine items, association and connection (AC) with three items, and evaluation and judgment (EJ) with four items. The study incorporated a Likert scale of 1 (strongly disagree) to 5 (strongly agree) to show the respondent's responses. Furthermore, we performed a measurement model (outer model), structural model (inner model), goodness of fit, and hypothesis testing. The measurement model covers convergent validity, discriminant validity, and composite reliability. The inner model is a structural model for predicting the causality relationship between latent variables and consists of measuring R-square, F-Square, and Q-square (Hair et al., 2020).

Common method variance estimation

To evaluate the presence of bias, this study followed criteria from Kock and Gaskins (2014); Hair et al. (2013) to achieve the common method variance when the full collinearity test is lower than 5.00.

RESULTS

Table 1 informs the demographic respondents that participated in this research, which was dominated by female students (60.83 percent). Capturing from parents' occupations, most respondents are from entrepreneurs' families (47.25%) followed by farmers (30.41%) and teacher/lecturer families. The participants of this research were students that enrolled in 2018 and 2019 and came from three universities, namely Universitas Negeri Malang, Universitas Negeri Semarang, and Universitas Negeri Jakarta. The table also informs the subject background of studies with the composition of economics education (57.17 percent), accounting (11.69 percent), and management (31.14).

Table 1. The respondents' profile

| S/No. | Information | Frequency | % |
|-------|---------------------|-----------|-------|
| 1. | Gender | | |
| | Female | 250 | 60.83 |
| | Male | 161 | 39.17 |
| 2. | Year class | | |
| | 2018 | 221 | 53.77 |
| | 2019 | 190 | 46.23 |
| 3. | Parents' occupation | | |
| | Entrepreneur | 195 | 47.45 |
| | Teacher/Lecturer | 50 | 12.16 |
| | Farmers | 125 | 30.41 |
| | Civil Servants | 41 | 9.98 |
| 4. | Subject | | |
| | Management | 128 | 31.14 |
| | Economic Education | 235 | 57.17 |
| | Accounting | 48 | 11.69 |

Measurement model

The estimation results suggest that the CR scores received for each construct range from 0.712 to 0.901 (> 0.70), while Cronbach's alpha ranges from 0.780 to 0.921 (> 0.70). Both CR and Cronbach's alpha fulfilled the construct reliability and convergent validity, indicating that the three latent constructs in this research have high levels of internal consistency (Hair et al., 2013). Table 6 shows that the AVE value of each variable is between 0.658 to 0.752 (> 0.50) so that it fulfills convergent validity.

Discriminant validity

The discriminant validity in this research was performed using Fornell-Larcker criterion (Fornell & Larcker, 1981). The statistical calculation showed that the cross-loading value or diagonal bold value should be higher than the cut-off value of 0.70. As informed in Table 2, the diagonal bold value of each construct is higher than 0.70, indicating the criteria were accomplished. In addition, Henseler and Schubert (2014) suggested measuring discriminant validity using the heterotrait-monotrait ratio (HTMT) with the cut-off value of 0.90. The analysis shows that the variables EL, SS, AC, EJ, and ISB have ratios below 0.90, and it indicates that the outputs support the existence of discriminant validity for every construct estimated (see Table 3).

Table 2. Discriminant validity (Fornell-Larcker)

| | AC | EJ | EL | ISB | SS |
|-----|--------------|--------------|--------------|--------------|--------------|
| AC | 0.811 | | | | |
| EJ | 0.794 | 0.815 | | | |
| EL | 0.654 | 0.668 | 0.867 | | |
| ISB | 0.746 | 0.725 | 0.751 | 0.867 | |
| SS | 0.772 | 0.631 | 0.629 | 0.636 | 0.841 |

Table 3. Discriminant validity (HTMT)

| | AC | EJ | EL | ISB | SS |
|-----|-----------|-----------|-----------|------------|-----------|
| AC | | | | | |
| EJ | 0.703 | | | | |
| EL | 0.803 | 0.761 | | | |
| ISB | 0.890 | 0.811 | 0.819 | | |
| SS | 0.841 | 0.721 | 0.701 | 0.691 | |

Variance inflation factor

The collinearity is performed considering a variance inflation factor (VIF) coefficient that should be less than 5.00 (Hair et al., 2013). To evaluate the presence of bias, this study followed criteria from Hair et al. (2013) to achieve the common method variance when the full collinearity test is lower than 5.00. Table 4 provides the output for EI, EL, FEE and PG variables, which have coefficients of VIF that are under 5.00, meaning there is no collinearity. Therefore, all of the estimated constructs are satisfied and can be performed for further analysis.

Table 4. Variance inflation factor (VIF)

| | AC | EJ | EL | ISB | SS |
|-----|-------|-------|----|-------|-------|
| AC | | | | 4.066 | |
| EJ | | | | 3.025 | |
| EL | 1.000 | 1.000 | | 2.091 | 1.000 |
| ISB | | | | | |
| SS | | | | 2.659 | |

Goodness of fit model

Table 5 informs the output of the goodness of fit analysis. From the table, it can be seen that the scores of α (0.740-0.934), CR (0.852-0.948), and AVE (0.658-0.752) have satisfied the criteria for goodness developed by Hair et al. (2013, 2020). Therefore, it can be remarked that the structural and measurement models in this research can be stated as goodness.

Table 5. Goodness of fit estimation

| Information | α | CR | AVE | Decision |
|--|----------|-------|-------|----------|
| Association and connection (AC) | 0.740 | 0.852 | 0.658 | goodness |
| Evaluation and judgment (EJ) | 0.831 | 0.887 | 0.664 | goodness |
| Economic literacy (EL) | 0.890 | 0.924 | 0.752 | goodness |
| Intention of starting a new business (ISB) | 0.934 | 0.948 | 0.751 | goodness |
| Scanning and search (SS) | 0.896 | 0.923 | 0.707 | goodness |

Hypothesis testing

The hypothesis estimation is performed using a statistical t-test where the criteria of t-count should be 1.645, and the p-value should be lower than 0.050. Table 6 provides information about the statistical results of the eight hypotheses proposed. The results showed that seven hypotheses were accepted, with a t-value ranging from 2.996 to 18.373 and a p-value ranging from 0.000 to 0.031. However, one hypothesis did not satisfy the criteria

Table 6. The summary of hypothesis testing via bootstrapping

| Hypothesis | Connectivity | β | SE | T-value | P-value | Confidence Interval (BC) | | Supported |
|----------------|--------------|---------|-------|---------|---------|--------------------------|-------|-----------|
| | | | | | | LL | UL | |
| H ₁ | EL → ISB | 0.407 | 0.052 | 7.763 | 0.000 | 0.314 | 0.486 | Yes |
| H ₂ | EL → SS | 0.629 | 0.034 | 18.373 | 0.000 | 0.568 | 0.681 | Yes |
| H ₃ | EL → AC | 0.654 | 0.038 | 17.102 | 0.000 | 0.587 | 0.714 | Yes |

| Hypothesis | Connectivity | β | SE | T-value | P-value | Confidence Interval (BC) | | Supported |
|----------------|--------------|---------|-------|---------|---------|--------------------------|--------|-----------|
| | | | | | | LL | UL | |
| H ₄ | EL → EJ | 0.668 | 0.038 | 17.805 | 0.000 | 0.602 | 0.728 | Yes |
| H ₅ | SS → ISB | 0.014 | 0.056 | 0.255 | 0.399 | 0.012 | -0.088 | No |
| H ₆ | AC → ISB | 0.315 | 0.069 | 4.559 | 0.000 | 0.201 | 0.434 | Yes |
| H ₇ | EJ → ISB | 0.195 | 0.064 | 3.051 | 0.001 | 0.093 | 0.300 | Yes |

Notes: t-value >1.645 (one-tailed test), p < 0.05, BC=bias corrected, UL= upper level, LL=lower level, SE= standard error, β = path coefficient.

Mediating estimation

The calculation in Table 7 shows that the two indirect effects, $\beta = 0.206$, $\beta = 0.130$, and $\beta = 0.203$ were significant with t-values of 4.322 and 2.996. The indirect effects 95% Boot CI Bias Corrected: [LL = 0.136, UL = 0.291], [LL = 0.066, UL = 0.206], and [LL =0.045, UL = 0.071], did not straddle a 0 in between, showing that there is a mediation effect (Preacher & Hayes, 2008).

Table 7. Mediating effect

| Hypothesis | Connectivity | β | SE | T-value | P-value | Confidence Interval | | Supported |
|-----------------|--------------|---------|-------|---------|---------|---------------------|-------|-----------|
| | | | | | | LL | UL | |
| H ₈ | EL→AC→ ISB | 0.206 | 0.048 | 4.322 | 0.000 | 0.136 | 0.291 | Yes |
| H ₉ | EL→EJ→ ISB | 0.130 | 0.043 | 2.996 | 0.001 | 0.066 | 0.206 | Yes |
| H ₁₀ | EL→SS→ ISB | 0.203 | 0.040 | 2.531 | 0.000 | 0.045 | 0.071 | Yes |

Figure 2 is the final model of SEM from this paper. Based on this figure, it can be seen that EL has a direct effect on SS, AC, and EC, with t-values of 8.908, 16.761, and 17.627, respectively.

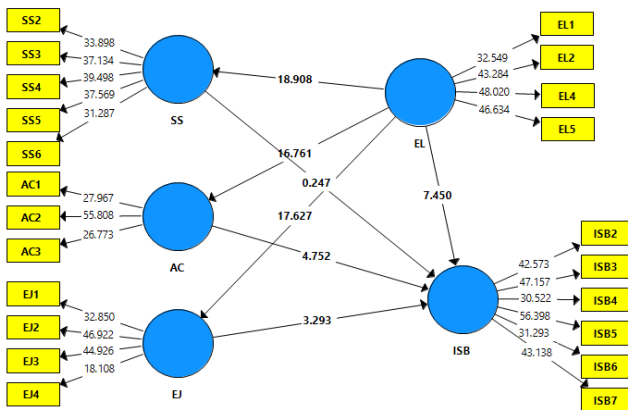


Figure 2. Final model of SEM

Furthermore, EL also has a direct effect on ISB with a t-value of 7.450. Based on Figure 2, it is also known that EJ and AC have a direct effect on ISB, with t-values of 3.293 and 4.752. Unfortunately, SS has no direct effect on ISB because of the t-value < 1.645 (0.247) and p-value > 0.05 . Figure 2 also explains that of the ten hypotheses proposed in this paper, nine hypotheses are accepted and one is rejected.

DISCUSSION

This research attempts to examine how economic literacy connects directly to the intention of starting a new business and also connects indirectly through entrepreneurial alertness as a mediating variable. Of the ten proposed hypotheses, our study accepted nine and rejected one hypothesis. The first finding revealed that economic literacy has an effect on the intention to initiate a new business among students. The basic rationale is that economic literacy covers a basic understanding of economics, i.e., trade-off, opportunity cost, entrepreneurship. This finding is an agreement with Suratno et al. (2021), which found that economic literacy could foster the intention of entrepreneurship. It remarks that having sufficient economic literacy will be beneficial for students to make a greater economic and entrepreneurial decision, which in turn affects their intention. This finding also supports some prior studies that confirmed this relationship (e.g., Setiawan et al., 2020; Rastiti et al., 2021; Rizqi et al., 2022). Indeed, with economic literacy, individuals can deal with complex economic problems and can apply the theory obtained to solve issues in initiating a new business (Nurjanah et al., 2018; Suratno et al., 2021).

In addition to influencing their intention to starting a new business, economic literacy also enables students to have the ability to scan and search (SS), and evaluate and judge (EJ). The logical thinking to support these outcomes is that economic literacy as a life skill that can be used in economic and entrepreneurial activities. Economic literacy that has been obtained by students in the schools and other resources has been processed in a cognitive dimension (Lusardi, 2019). As previously mentioned, alert scanning and search involves the cognitive ability to determine the action of looking for new opportunities that are unique and unconventional (Cameron & Lim, 2019). Similarly, economic literacy can also impact on alert association and connection as the second process after scanning and search (Sasseti et al., 2022). These findings support antecedent studies by Lin et al. (2017); Setiawan et al. (2020) who mentioned that economic literacy is a cognitive source for an entrepreneur in increasing entrepreneurial sensitivity, which

includes scanning and search, association and connection, as well as evaluation and judgment on existing business opportunities.

Furthermore, this study also confirmed the connectivity between the entrepreneurial alertness dimension (alert scanning and search, association and connection, evaluation and judgment) and the students' intention to create a new business. This result is rational and strengthens the findings of many previous scholars (Doanh et al., 2021; Neneh, 2019; Urban, 2019), who showed that association and connection as well as evaluation and judgment are part of entrepreneurial alertness that had a positive effect on the intention to establish a new business and pursue existing opportunities from their new business. Association and connection, as well as evaluation and judgment, not only enable entrepreneurs to identify new business opportunities that are missing or not thought of by others, but also provide consideration in making decisions appropriately and effectively (Fatoki & Oni, 2015). Someone who has a high sensitivity to the existence of business opportunities will increasingly intend to establish a new business that is different from the existing businesses in the community (Sasseti et al., 2022).

In addition, individuals who are aware of entrepreneurial opportunities are more likely to be involved in an entrepreneurial career path because it provides broad opportunities for these individuals to move according to the identified opportunities (Hu & Ye, 2017; Neneh, 2019). Although this study found that alert association and connection, alert evaluation and judgment had a positive effect on the intention to set up a new business, alert scanning and search failed in explaining students' intention of starting new business. This finding contradicts a number of previous studies (Doanh et al., 2021; Neneh, 2019; Urban, 2019). However, the output of this study will highlight the advantages as important inputs for universities and stakeholders to be more active in improving economic literacy for students. The aim is to not only increase association and connection, and evaluation and judgment, but also scanning and search as important predictors in increasing students' intention to establish new businesses.

Lastly, the findings noted that alert association and connection, alert evaluation and judgment, as well as scanning and search could mediate the effect of economic literacy on the students' intention to set up a new business. The basic explanation to support this finding is that entrepreneurial alertness deals with the decision process to enhance opportunities through process of association and evaluation. The mediating role of entrepreneurial alertness notes that through scanning and searching, associating and connecting, assessing and judging, individuals with higher levels of alertness are actively identifying and taking advantage of new opportunities to become entrepreneurs. This result strengthens the studies of several

previous scholars (Doanh et al., 2021; Neneh, 2019; Urban, 2019), where association and connection, and evaluation and judgment can be mediating variables of the influence of economic literacy on the intention to establish a new business. Entrepreneurial alertness increases the level of personal search and scanning, gathering relevant information, making decisions about identifying opportunities, and shaping entrepreneurial intentions and actions. This outcome can be a new insight that to increase the intention to initiate a new business, the association and connection and evaluation and judgment should obtain more attention. Individuals need to take advantage of the available information through search, association and connection, evaluation and assessment as well as prior knowledge of economics in economic literacy (Montiel Campos, 2017). Thus, association and connection as well as evaluation and judgment, as an important part of being aware of business opportunities, can mediate the effect of economic literacy on the intention to establish a new business.

CONCLUSION

This research aims to examine the relationship between economic literacy, entrepreneurial alertness, and students' intention to start a new business, as well as to understand the mediating role of entrepreneurial alertness. This research confirmed eight hypotheses proposed and rejected one hypothesis. In detail, economic literacy can have an impact on students' entrepreneurial alertness and intention to start a new business. Indeed, entrepreneurial alertness can mediate the relationship between economic literacy and the intention of starting a new business. However, among entrepreneurial alertness dimensions, scanning and search failed in determining the students' intention of starting a new business. The findings can be a new insight to increase the intention to establish a new business, economic literacy, and entrepreneurial alertness, which includes scanning and search, association and connection, and evaluation and judgment dimensions.

This study provides some implications. First, it presents essential inputs for universities and stakeholders to be more active in improving economic literacy for students. In addition to improving entrepreneurship education through practice and project-based learning, economic literacy must be improved through learning economics. This paper also has practical implications for increasing students' intention to establish new businesses, and economic literacy must be renewed. Furthermore, economic literacy also needs to be associated with examples relevant to entrepreneurial activities, especially in the aspects of production, distribution, and online marketing.

The logical consequence of this finding is that economic education and entrepreneurship education in universities must reinforce each other. Likewise, the activity of presenting economic and entrepreneurship experts on campus through seminars and workshops can increase the dimensions of mindset and intention to establish new businesses.

Like other papers, this study has limitations. This research only examines some of the important predictors of the intention to establish a new business, namely economic literacy and entrepreneurial attitude, which includes scanning and search, association and connection, and evaluation and judgment. Further research needs to test the full model involving the theory of planned behavior (TPB) by Ajzen (1991). Future researchers also need to involve respondents from various universities in Indonesia and other countries to reach more holistic and generalizable results.

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Abstrakt

CEL: Zwiększenie liczby przedsiębiorców jest ważnym badaniem mającym na celu zwalczanie problemów gospodarczych i społecznych. Czynniki psychologiczne uważane za skuteczne stymulatory zachowań przedsiębiorczych przyciągnęły wielu badaczy w ostatniej dekadzie. Celem tych badań jest próba zbadania, w jaki sposób wpływ wiedzy ekonomicznej może promować zamiar założenia nowej firmy wśród studentów oraz zbadanie roli czujności przedsiębiorczej w pośredniczeniu w tej relacji. **METODYKA:** W badaniu przyjęto podejście ilościowe, w którym hipotezy zostały oszacowane statystycznie przy użyciu modelowania równań strukturalnych (PLS-SEM) w oparciu o dane ankietowe z wykorzystaniem samodzielnie wypełnionego kwestionariusza (n=450) z kilku uniwersytetów w Indonezji. **WYNIKI:** Analiza wskazuje, że znajomość ekonomii ma znaczący wpływ na czujność uczniów w zakresie przedsiębiorczości i zamiar rozpoczęcia nowej działalności gospodarczej. Rzeczywiście, przedsiębiorcza czujność może pośredniczyć w związku między znajomością ekonomii a zamiarem założenia nowej firmy. Jednak wśród wymiarów czujności przedsiębiorczej skanowanie i wyszukiwanie nie powiodło się w określeniu intencji studentów do założenia nowej firmy. **IMPLIKACJE:** Wynik tych badań może zapewnić wgląd w literaturę na temat przedsiębiorczości i decydentów zainteresowanych tworzeniem nowych przedsiębiorstw. Poza tym instytucje edukacyjne mogą rozważyć kwestię umiejętności ekonomicznych jako część swoich programów nauczania, aby wspierać zamiary studentów dotyczące zakładania działalności gospodarczej. Ponadto znajomość ekonomii musi być powiązana z przykładami odnoszącymi się do działalności przedsiębiorczej, zwłaszcza w zakresie produkcji, dystrybucji i marketingu internetowego. **ORYGINALNOŚĆ I WARTOŚĆ:** Interesujące wyniki tego artykułu przypominają, że czujność przedsiębiorcza jest jedną ze zmiennych predykcyjnych i mediatorów zwiększania intencji uczniów. Oznacza to, że czujność przedsiębiorczą można zwiększyć dzięki znajomości zagadnień ekonomicznych, a także w jaki sposób należy je wykorzystać do ulepszenia programu nauczania i pedagogiki nauczania. Ponadto instytucje edukacyjne mogłyby zapewnić programy staży biznesowych i inkubatory przedsiębiorczości, aby wzbudzić w studentach chęć rozpoczęcia działalności gospodarczej. **Słowa kluczowe:** wiedza ekonomiczna, czujność przedsiębiorcza, intencja, rozpoczęcie działalności gospodarczej

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Conflicts of interest

The authors declare no conflict of interest.

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