



Determinant Factors for the Formation of Entrepreneurial Ability and Character in Private Teacher Training Colleges

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Abstract

This research aims to examine the relationship between ability and effort, intellectual skills, emotional skills, spiritual skills, digital skills and students' entrepreneurial character and abilities. The quantitative method was obtained through an online survey involving 200 students from Private IKIP in Central Java. Data were analyzed using Structural Equation Modeling (SEM), because it is able to test complex relationships between latent variables and indicators simultaneously and provide accurate estimates of the structural and measurement models. The research results show that ability (AE) has a significant relationship of 1.15%, while emotional skills (ES) make a small contribution of 0.13% to entrepreneurial character (later_var1). Intellectual skills (CG) have a strong influence of 0.04%, Digital Skills (DS) have a strong influence of 0.21%, and spiritual skills (SS) have a strong influence of 0.91% on entrepreneurial ability (laten_var2). However, no significant direct relationship was found (0%) between entrepreneurial character (laten_var1) and entrepreneurial ability (laten_var2). These findings show that ability and effort, intellectual skills, emotional skills, spiritual skills, digital skills can shape character and entrepreneurial abilities. This study identifies limitations of the model and sample, and recommends moderating factors in future research.

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INTRODUCTION

Entrepreneurial competence has become a primary need in producing a young generation that is not only ready to work in the corporate world, but also able to create opportunities and manage businesses independently (McCray et al., 2021). Given the ever-changing and evolving market dynamics, the ability to adapt quickly, innovate, and have high competitiveness becomes very important.

Private Teacher Training Colleges as an educational institution that prepares prospective teaching staff and future leaders has a strategic role in preparing students. Therefore, we must not only teach knowledge in the field of education, but we must also teach knowledge in other fields, one of which is entrepreneurship. Considering the current conditions where job opportunities to become teachers are very limited, entrepreneurial competence is very important, especially to overcome the problem of unemployment at undergraduate level. In this way, higher teacher education institutions try to contribute so that their graduates are able to face the world of professional work. (Shahzad et al., 2021). In this context, universities are not only tasked with transferring knowledge, but also forming the character, skills, and mindset of students who are ready to face global challenges (Lynch et al., 2021).

The development of entrepreneurial competencies in private teacher training colleges has high relevance, considering the need to produce graduates who are able to contribute to the development of the community economy, especially through a more independent and innovation-based business sector (Igwe et al., 2021). Along with the advancement of technology and globalization, the world of entrepreneurship is increasingly dependent on the ability to think creatively and utilize existing resources effectively (Almeida et al., 2021). Entrepreneurial competencies possessed by students do not only include technical skills, such as the ability to design and manage a business, but must also be sup-

ported by other skills that are more holistic and in-depth (Secundo et al., 2021). One of them is intellectual skills which are very important in helping students understand and analyze various economic and business phenomena, and make the right decisions based on the knowledge they have (Silveyra et al., 2021).

Entrepreneurship is not just about technical knowledge and skills. Emotional factors also play an equally important role (Dagne et al., 2020). Entrepreneurship involves a lot of risk and uncertainty, so students need to develop emotional skills to stay calm and resilient in facing challenges (Bauman & Lucy, 2021). The ability to manage emotions, deal with failure, and learn from mistakes is essential in building the character of a resilient entrepreneur (Hultén & Tumunbayarova, 2020). In addition, the spiritual aspect also provides a deep ethical dimension in entrepreneurship. In the midst of the temptation to pursue profit alone, students need to be taught to stick to values that prioritize honesty, integrity, and social responsibility in running a business (Magdaraog, 2015). Along with the development of the times, digital skills have also become an element that cannot be ignored in entrepreneurial competence (Din et al., 2016). The advancement of information and communication technology opens up new opportunities for students to develop their businesses using various digital platforms, from online marketing to technology-based financial management (Obadiaru et al., 2020). Therefore, private teacher training colleges must pay attention to the development of digital skills among students, so that they can make optimal use of technology in running their businesses (Wardana et al., 2020).

The basic entrepreneurial skills possessed by students play a very important role in directing them to create innovative business ideas and run businesses with full commitment and perseverance (Salun et al., 2021). As an initial foundation, this capability not only includes practical skills such as planning and resource management, but also reflects an entrepreneurial spirit that is oriented towards

opportunities and solutions (Maheshwari et al., 2023). Students who have a strong understanding of the basics of entrepreneurship are better able to face market dynamics and create products or services that have added value for consumers (Hong et al., 2020). This spirit, if supported by determination and consistent effort, will form an attitude of never giving up and the determination needed to achieve success in running a business, even when facing many unexpected challenges (Mi'rajatinnor et al., 2022). Intellectual skills are a determining factor in the development of student entrepreneurship (Jena & Bhardwaj, 2021).

In-depth knowledge of entrepreneurial theories, as well as sharp analytical skills, enable students to better understand and interpret market dynamics (Saptono et al., 2019). They will be able to identify business opportunities, design effective strategies, and manage risks wisely. These abilities also underlie more rational and data-based decision-making, which can reduce uncertainty in running a business (Hasibuan & Apriandi, 2020). With strong knowledge and analytical skills, students will be more confident in making decisions that support the growth and sustainability of their businesses (Rahayu & Dong, 2023). In this context, intellectual skills also serve as a tool to optimize all aspects of business operations, from marketing to financial management, which in turn will increase the chances of success of the business being run (Wibowo et al., 2023).

In addition, emotional skills have a very vital role in facing various challenges that arise on the entrepreneurial journey (Alif et al., 2020). Business is not always smooth sailing, and students will often be faced with failures, pressures, or obstacles that test their mental resilience (Nahulae & Zamtinah, 2020). Students who have good emotional intelligence will be able to manage stress, remain calm in the face of failure, and learn from every experience they have (Sherly et al., 2023). The ability to stay motivated and maintain enthusiasm despite failure or adversity is one of the important qualities that distinguishes success-

ful entrepreneurs (Halberstadt et al., 2022). In addition, this skill also supports the ability to interact with teams, business partners, and customers, all of which require good communication and empathy skills (Al-Jinini et al., 2019). Students who are able to manage their emotions wisely will be able to adapt more easily to the fast-paced and uncertain business environment (Seckler et al., 2018). On the other hand, spiritual skills also have a big influence on entrepreneurial success (Rosete & Ciarrochi, 2005). This aspect includes integrity, ethics, and social awareness that every entrepreneur must have (Nawaz et al., 2019). Entrepreneurship is not just about gaining material profit, but also about how to run a responsible business and have a positive impact on society and the environment (Horng et al., 2020). Students who have a strong spiritual foundation will be able to manage a business with principles that support sustainability, both from an economic, social, and environmental perspective (Farber Canziani & Welsh, 2021). For example, they will be more likely to choose ethical business practices, prioritize fairness in employment relationships, and be responsible for the social impact of their business. These spiritual skills provide a clear direction in running a business, where the goal is not only to achieve profit alone, but also to contribute more broadly to the common good (Sánchez-Medina et al., 2020).

Digital skills are becoming increasingly important in the context of modern entrepreneurship, which is increasingly reliant on technological advancements. Data from the World Economic Forum (2023) shows that approximately 70% of future jobs will require digital skills, while a survey conducted by McKinsey (2022) found that companies with a high level of technology adoption are 2.5 times more likely to achieve significant business growth. In Indonesia, a report from Startup Ranking (2023) indicates that the country has more than 2,500 digital startups, ranking fifth globally, highlighting the importance of digital skills for young entrepreneurs in the digital era (Lee et al., 2019). In this digital era where

everything is connected, students need to master various digital tools and platforms to efficiently manage and develop their businesses (Thomas et al., 2015). From digital marketing, data analysis, to technology-based operational management, all are integral parts of running a competitive business (Peschl et al., 2023). Digital skills enable students to access wider markets, directly interact with consumers through social media, and leverage technology to enhance productivity and minimize operational costs (Dantas de Figueiredo, 2021).

Moreover, with the increasing advancement of new technologies such as artificial intelligence (AI) and the internet of things (IoT), students with digital skills will be able to utilize these innovations to create more efficient products or services that align with market needs (Kummitha & Kummitha, 2021). For instance, data from Statista (2024) shows that the use of AI in businesses is projected to grow by 38% annually until 2030, providing significant opportunities for young entrepreneurs to adopt this technology. Mastering digital skills is not only a necessity but also a great opportunity for students to excel in global business competition (Treanor et al., 2021). Thus, entrepreneurial competencies that include basic skills, intellectual, emotional, spiritual, and digital skills will shape an entrepreneur who is not only adept at running a business but also capable of adapting, innovating, and taking responsibility at every step (Ndou et al., 2019). Success in the entrepreneurial world requires a balance between technical knowledge, mental resilience, ethical values, and the effective use of technology (Al-edenat & Alhawamdeh, 2021). Through the development of these competencies, students will be better prepared to face the challenges of an increasingly complex and dynamic business world (Ferdinand, 2021).

The development of students' entrepreneurial competencies is a topic that has been widely researched, but many studies tend to focus on certain aspects such as technical skills or business knowledge, without integrating the various dimensions that influence ent-

repreneurial competencies holistically (Wahyu, 2020). In the context of private teacher training colleges, there is still a gap in the literature that connects basic entrepreneurial skills with other factors such as intellectual, emotional, spiritual, and digital skills in forming sustainable entrepreneurship (Bingbing, 2024). Previous studies have mostly focused more on the development of students' technical skills or separate psychological aspects, and not many have attempted to explore the interrelationships between the various dimensions of these skills in the broader context of entrepreneurship education.

Previous research shows that students' entrepreneurial competence is influenced by various factors. For example, research by (Mukhyar & Puspita, 2022) identified the importance of technical skills and managerial abilities in entrepreneurship, but have not discussed in depth how emotional and spiritual skills influence students' entrepreneurial decisions. Likewise, research conducted by (Adriani, 2019) emphasizes the importance of entrepreneurship education as a major factor in improving students' entrepreneurial readiness, but tends to focus on the intellectual aspect and pays less attention to the influence of digital skills in today's modern era. In addition, many studies focus more on the context of public universities and do not take into account the context of private teacher training colleges that have special characteristics in organizing educational programs, such as focusing on the development of soft skills and moral character related to entrepreneurship.

Masitoh & Rozi (2022) found that the development of soft skills such as communication and leadership skills influences entrepreneurial readiness, but the study did not include the element of spiritual skills that can play a role in managing a business ethically and socially responsible. In addition, there is a gap in understanding how digital skills influence the development of entrepreneurial competencies among students, especially in private teacher training colleges that may not have fully utilized technology in their entrepreneurship edu-

cation. The study (Adriani, 2019) shows that entrepreneurship education that integrates digital technology can increase learning effectiveness, but its application is still limited and has not been explored in depth in the context of private universities in Indonesia.

This study attempts to fill the gap by examining the relationship between various dimensions of entrepreneurial competency, namely basic entrepreneurial skills, intellectual skills, emotional skills, spiritual skills, and digital skills in shaping the entrepreneurial abilities and character of students in private teacher training colleges.

This research aims to: (1) Analyze the factors that influence each other in a holistic entrepreneurial context, especially in a private higher education environment that focuses on teacher education; (2) Identify the relevance of technology integration in entrepreneurship development, both in terms of business management and innovation in creating business opportunities; (3) Providing new literature contributions to bridge research gaps related to entrepreneurship in a more comprehensive context; (4) Evaluate the impact of the application of technology on increasing students' entrepreneurial abilities in teacher education-based private universities; and (5) Develop practical recommendations to improve learning and implementation of technology-based entrepreneurship in private universities.

METHODS

This research was conducted using quantitative methods. Data collection was carried out by distributing questionnaires which were developed based on valid and reliable measurement scales found in the literature. The questionnaire was measured using a 5-point Likert scale, ranging from (1) for "strongly disagree" to (5) for "strongly agree". This research uses several main variables, namely Ability & Effort which is measured by the ability and effort of students to get good grades in entrepreneurship courses, the ability and effort of students to obtain information

on successful entrepreneurship; Intellectual Skills are measured by students' ability to obtain information about entrepreneurship, the ability to interpret information related to entrepreneurship; Emotional Skills are measured by self-control, motivation; Spiritual Skill which is measured through calmness in facing entrepreneurial challenges, being able to utilize spiritual resources to solve problems; and Digital Skills, measured by indicators of students' ability in digital marketing and digital ideas for products, students' ability to use computers,.

The data were analyzed using structural equation modeling (SEM) with the help of R-Studio-R-V4.4 software. RStudio has the main advantages of flexibility and high customization capabilities compared to SmartPLS and AMOS. With packages like lavaan, RStudio supports various types of SEM (covariance-based or Bayesian), which are not as limited as SmartPLS (only PLS-SEM). Additionally, RStudio is better suited for big data analysis, cross-platform integration, and complex data pipelines. RStudio also excels in data visualization with ggplot2, supports various statistical analysis and machine learning methods, and is open-source and free, making it more economical and versatile than AMOS and SmartPLS (Jonathan, 2010).

This method was chosen for this study because it is used in models with several independent variables and many dependent variables. In addition, SEM is very suitable for analyzing mediation models, making it ideal for analyzing complex relationships between the variables involved. Given that the research variables are measured using a Likert scale, SEM is also the best method for handling ordinal data (not normally distributed) (Handayani, 2020).

PLS data analysis was conducted in two steps: measurement model analysis and structural model analysis. Measurement model analysis was mainly used to test validity and reliability. Validity testing was conducted by measuring convergent validity and discriminant validity. Loading factor values > 0.7 and

average variance extracted (AVE) values > 0.5 indicate that an indicator meets the convergent validity criteria (Hair, Matthews, Matthews, & Sarstedt, 2017). Meanwhile, discriminant validity was tested using cross-loading criteria and Fornell-Larcker criteria. Cross-loading criteria are used if each indicator has a higher value than other indicators in the same variable. Fornell-Larcker criteria are used if the correlation between variables with the square root of AVE is higher than the correlation between other variables in the research model (Al_Janabi, 2020).

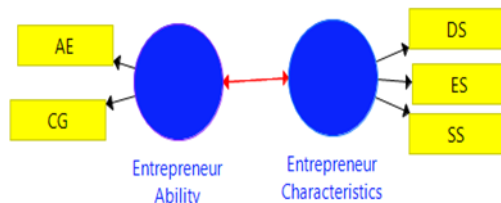


Figure 1. Research Model

Data is considered reliable if the Cronbach's alpha, rho_c, and rho_a values are > 0.7 (Wei, 2022). Likewise, structural analysis must meet several criteria, including a weighted P-value < 0.05 (as a basis for drawing conclusions); an R^2 value of 0.75 (strong), 0.50 (moderate), or 0.25 (weak); and an F^2 value of 0.02 (weak effect), 0.15 (moderate effect), or 0.35 (strong effect) (Akram, 2021).

Table 1 presents the profile of the respondents for this research, totaling 200 respondents. The respondents used were 200 people so that the research results were Best Linear Unbiased Estimator (BLUE). The method used was purposeful random sampling. The criteria determined by researchers are: with a sample of private teacher training colleges in the former Pekalongan residency, the students in the sample had taken entrepreneurship courses. The results show that most of them are female (51.3%), aged 18–20 years (52%), and live in Central Java (100%). It can also be ascertained that all respondents are student entrepreneurs and some have families with a business background.

Table 1. Respondent Profile

Character	Scale	%
Gender	Male	97 52
	Female	103 48
Age	18-20	104 52
	21	96 48
Origin of Domicile	Central Java	200 100
Entrepreneurship Ownership	Yes	98 49
	No	102 51
Having a Family with a business background	Yes	79 39
	No	121 61

Source: Processed primary data (2024)

RESULT AND DISCUSSION

In the initial stage, validity and reliability tests were conducted to assess the quality of data in the research model. Table 2 shows the factor loading value > 0.7 and AVE value > 0.5 , indicating that the research model meets the convergent validity requirements (Cherkasov, 2019). In addition, based on the cross-loading criteria and the Fornell-Larcker criteria in Table 2, the results obtained are that the latent variable indicator has a larger construct compared to other indicator constructs and the square root of AVE is greater than the sum of all construct relationships, indicating that the research model meets the requirements of discriminant validity. Table 2 shows the results of the reliability test with Cronbach's alpha, rho_c, and rho_a values > 0.7 (Zheng, 2021). Therefore, it can be concluded that all latent variables are reliable.

Structural model analysis was performed using R Studio. Table 3 shows the R^2 value, which describes the contribution of independent variables to the dependent variable and discriminant validity. The results show that intellectual skills, emotional skills, and digital skills contribute 0.99 (or 99%) to entrepreneurial ability. Meanwhile, Ability and Effort, and Spiritual Skills contribute 0.165 (or 16.5%) to entrepreneurial character.

Table 2. Convergent Validity and Reliability

Construct	Convergent Validity	Reability		
	Ave	Cronbach's Alpha	<i>Rho_C</i>	<i>Rho_A</i>
CG	0.54	0.815	0.851	0.852
AE	0.58	0.773	0.788	0.789
DS	0.54	0.815	0.851	0.852
SS	0.58	0.791	0.731	0.731
ES	0.58	0.722	0.719	0.719

Source: Processed primary data (2024)

In this study, the R^2 value shows a strong to weak influence of Ability & Effort, Intellectual Skills, Spiritual Skills, Emotional Skills, and Digital Skills that are felt towards increasing entrepreneurial ability and character respectively; a weak influence of Spiritual Skills towards entrepreneurial intention; and a weak influence of entrepreneurial intention towards Ability & Effort.

Based on the hypothesis testing results, the latent variable *latern_var1* is significantly influenced by AE with a path coefficient of $\beta=1.015$ (weak category) and CG with $\beta=0.042$ (strong category). Meanwhile, the latent variable *latern_var2* is influenced by three variables: ES with $\beta=0.138$ (strong category), SS with $\beta=0.915$ (weak category), and DS with $\beta=0.212$ (strong category, although with lower significance). However, the relationship

between *latern_var1* and *latern_var2* is not significant, with $p=0.193$ $p = 0.193$, indicating no substantial influence between the two latent variables. Thus, the final model suggests that the influence of independent variables on *latern_var1* and *latern_var2* is more prominent than the relationship between the two latent variables.

Further Based on the results hypothesis testing, there are five main relationships that can be interpreted. First, the AE variable has a significant direct effect on *latern_var1* ($\beta=1.015$, $p = 0.000$, $T = 1.960$).

Although the strength of the influence is relatively weak (0.031), this relationship shows that AE significantly affects *latern_var1*. Second, the CG variable also significantly affects *latern_var1* ($\beta=0.042$, $p = 0.052$, $T = 1.682$).

Table 3. Structural Models

Hypothesis Testing Results	Hypothesis	β Testing	P Value	T Statistic	Decision	Model Parameter	Value and Category
Direct Effect	AE-> <i>latern_var1</i>	1.015	0.000	1.960	Supported	R^2	0.031 (weak)
	CG-> <i>latern_var1</i>	0.042	0.052	1.682	Supported		0.998 (strong)
	ES-> <i>latern_var2</i>	0.138	0.000	1.840	Supported		0.981 (strong)
	SS-> <i>latern_var2</i>	0.915	0.040	2.049	Supported		0.162 (weak)
	DS-> <i>latern_var2</i>	0.212	0.083	1.734	Supported		0.955 (strong)
	<i>latern_var1</i> -> <i>latern_var2</i>	0.000	0.193	1.303	Not Supported		0.000 (does not affect each other)

Source: Processed primary data (2024)

Although the path coefficient value is small, the strength of its influence is relatively strong (0.998), indicating a small but significant direct influence. Third, the ES variable has a significant influence on *latern_var2* ($\beta = 0.138$, $p = 0.000$, $T = 1.840$), with a strong influence strength (0.981). This shows that ES contributes to the formation of *latern_var2* although not dominant. Fourth, the SS variable also significantly affects *latern_var2* ($\beta = 0.915$, $p = 0.040$, $T = 2.049$). Although the strength of the influence is weak (0.162), this relationship still shows that SS plays a role in influencing *latern_var2*. Fifth, the DS variable has a significant influence on *latern_var2* ($\beta = 0.212$, $p = 0.083$, $T = 1.734$). With a strong influence strength (0.955), this relationship shows that DS affects *latern_var2* significantly, although the level of significance is close to the threshold.

However, the relationship between *latern_var1* and *latern_var2* is not supported by the data ($\beta = 0.000$, $p = 0.193$, $T = 1.303$). This shows that the two latent variables do not have a significant influence on each other, so they do not influence each other in this model. Overall, these results illustrate the dynamics of the relationship between variables in the model with various levels of influence strength.

Testing the hypothesis listed in Table 3, there is a significant direct relationship between the ability & effort variables and *latern_var1* (entrepreneurial attitude) (Al-Issa, 2020). This relationship is shown by the coefficient value. $\beta = 1.015$, which indicates a fairly clear positive influence of ability & effort on *latern_var1*. The results of the statistical test show a p-value of 0.000, which is smaller than the significance threshold of 0.05, so it can be concluded that the relationship between these two variables is significant.

In addition, the T-statistic value of 1.960 also strengthens this finding, indicating that the test results are statistically valid. However, although this relationship is statistically significant, the strength of the influence indicated by the coefficient value of 0.031 is relatively weak. This figure indicates that alt-

hough ability & effort have a positive impact on *latern_var1* (entrepreneurial characteristics), the magnitude of the influence is not too large (Jiang, 2024). This shows that although increased ability and effort can contribute to entrepreneurial character, the impact is not dominant or very strong (Rana, 2019). In other words, the Ability & Effort factor may only play a role as one of a number of other factors that contribute to shaping entrepreneurial character (Saputro, 2020). Other factors that may influence *latern_var1* (entrepreneurial character) can be very diverse, such as psychological, social, or even situational factors.

Previous entrepreneurial experience, social support, or market conditions may play a more significant role in shaping an individual's entrepreneurial characteristics (Lu, 2022). Therefore, although Ability & Effort has a significant relationship, it should be noted that its influence on entrepreneurial characteristics cannot be seen separately from the influence of other factors that may play a role. Overall, although the relationship between Ability & Effort and *latern_var1* shows significant results, the magnitude of the influence found in this study tends to be low, and this leads to the need for further research to explore other factors that can strengthen or explain entrepreneurial attitudes in more depth (Wang, 2021).

Results the analysis shows that intellectual skills have a significant influence on the variable *latern_var1* (entrepreneurial character) with a path coefficient value of $\beta = 0.042$, $p = 0.052$, and $T = 1.682$. In other words, although the resulting effect is not as large as some other variables in the model, intellectual skills still provide a strong and meaningful contribution to the development of entrepreneurial character (Kulago, 2019). Although the value of this path coefficient is relatively small, the influence shown by Intellectual Skills on entrepreneurial attitudes remains statistically significant. One interesting aspect is that even though the path coefficient for intellectual skills is smaller, the value of the strength of its influence is still quite large, namely 0.998 (Tupas, 2020). This shows that the

intellectual skills factor has significant power in influencing entrepreneurial character, although the effect is not direct or not as strong as variables such as ability & effort (Zuim, 2021). This phenomenon can be interpreted that even though the contribution of intellectual skills to entrepreneurial character is smaller when compared to other variables, this factor still plays a very important role in forming and influencing a person's entrepreneurial character (Chen, 2022).

Intellectual Skills, which includes the ability to think critically, solve problems, and innovate, provides a basis for individuals to have a more open attitude towards entrepreneurial opportunities, as well as facilitating individuals in making smart and strategic decisions in the business world. This strong, although small, effect indicates that cognitive factors still have a role that cannot be ignored in preparing individuals to become successful entrepreneurs (Hu, 2022).

Furthermore, although the influence of intellectual skills on entrepreneurial character is relatively small, the high strength of the influence indicates that this factor makes a substantial contribution in the context of entrepreneurship, in a more subtle but important way. This also emphasizes that entrepreneurial character is not only shaped by physical abilities or obvious efforts, but also by deeper intellectual abilities, which enable individuals to recognize and exploit opportunities in a more effective way (Peng, 2022).

Therefore, even though the direct effect of intellectual skills is not as large as other factors such as ability & effort, its contribution to improving entrepreneurial character still has a significant and crucial impact in forming successful and sustainable entrepreneurship (Sumalinog, 2022). To strengthen the understanding of the influence of various factors on entrepreneurial ability, it is important to see the role of emotional skills in this context. As explained earlier, although intellectual skills are not as big as other factors, their contribution is still significant in forming sustainable entrepreneurship. In addition, the results of

the study also show that emotional skills have an equally important influence in strengthening students' entrepreneurial abilities.

The results of the study show that the emotional skills variable has a significant influence on the latent variable of entrepreneurial ability ($\beta = 0.138$, $p = 0.000$, $T = 1.840$) with a strong relationship strength (0.981). This confirms that emotional skills, which include an individual's ability to recognize, manage, and control emotions, play an important role in building entrepreneurial skills. These skills enable students to face challenges, manage stress, and build effective interpersonal relationships, all of which are key elements in entrepreneurial activities (Silveira, 2019). This finding is in line with research by (Chowdhury, 2021), which states that emotional intelligence is the foundation for adaptive decision making and risk management in the world of entrepreneurship. In addition (Ramos, 2022), also highlighted that emotional skills can improve individuals' ability to understand market needs and innovate creatively, which contributes to the development of entrepreneurship.

In the context of private teacher training colleges, the implementation of emotional skills development programs can be an effective strategy to improve students' entrepreneurial competencies (Diao, 2020). Programs such as stress management training, empathy strengthening, and social intelligence development are expected to improve students' abilities in facing the dynamics of the world of work and entrepreneurship (Ghafur, 2021). Thus, universities need to integrate the development of emotional skills into the entrepreneurship curriculum to prepare students to become resilient and adaptive entrepreneurs (F. Li, 2020). Along with the importance of emotional skills in developing entrepreneurship, spiritual skills also play an equally important role. The results revealed that spiritual skills have a significant influence on entrepreneurial ability, thus adding evidence that the development of non-technical competencies, such as spirituality, can strengthen the foundation of student entrepreneurship.

Results Hypothesis testing shows that spiritual skills have a significant influence on *latern_var2* (entrepreneurial ability), with a path coefficient of $\beta = 0.915$, $p = 0.040$, and $T = 2.049$. A p value smaller than 0.05 indicates that the relationship between spiritual skills and entrepreneurial ability is statistically significant. However, although the influence is significant, the influence is relatively weak, with a strength of influence value of only 0.162. This figure shows that although there is a measurable influence, the impact of spiritual skills on entrepreneurial ability is not as large as the influence of other variables, such as emotional skills or cognitive abilities (Gundi, 2020). Although spiritual skills can contribute to increasing entrepreneurial ability, its influence seems to be smaller, indicating that other factors have a more dominant role in influencing entrepreneurship.

Spiritual skills that include self-awareness, moral values, and higher life goals are important in forming an ethical and sustainable entrepreneurial character (Alfaro-Arce, 2019). However, its contribution to overall entrepreneurial ability may not be as large as practical or technical factors that are more directly related to decision-making and the implementation of daily entrepreneurial activities. In addition, this weak influence strength may also indicate that there are other factors that mediate or weaken the relationship between spiritual skills and entrepreneurial ability. There may be other factors, such as practical experience, social support, or environmental factors that have a stronger influence on how entrepreneurial ability is formed. Therefore, although spiritual skills show a significant influence, their effect on entrepreneurial ability seems to be more limited and may need to be considered in a more holistic context, involving the interaction between various internal and external factors in entrepreneurship (Yasuike, 2019).

Digital skills have a significant impact on entrepreneurial ability, its influence seems to be more limited compared to other more prac-

tical and technical factors. In this case, digital skills also emerge as an important factor in the development of entrepreneurship. The results of the hypothesis test show that digital skills have a significant influence on entrepreneurial ability, which shows its relevance in the context of an increasingly developing and technologically connected entrepreneurial world.

Results Hypothesis testing shows that Digital Skills has a significant influence on *latern_var2* (entrepreneurial ability), with a path coefficient of $\beta = 0.212$, $p = 0.083$, and $T = 1.734$. Although the p value is close to the significance limit ($p < 0.1$), this relationship still shows that Digital Skills have a fairly large influence on entrepreneurial ability. This influence is also strengthened by the strong influence strength value, which is 0.955, which indicates that Digital Skills make a significant contribution to shaping individual entrepreneurial ability (Sood, 2023). In today's digital era, skills in using technology and digital platforms are important factors that can influence entrepreneurial success.

The ability to manage multiple digital tools, such as social media, e-commerce, and software and applications used in business, provides a significant competitive advantage for entrepreneurs (Z. Li, 2022). With digital skills, an entrepreneur can be more efficient in managing business operations, increasing brand visibility, and accessing a wider market globally. Although the p -value for this relationship is slightly below the traditional significance threshold, the large strength of the influence still shows that digital skills play an important role in entrepreneurial ability that cannot be ignored (Mengstie, 2023). In this context, these results emphasize that digital skills are not just an addition, but are becoming an increasingly important and relevant factor in the development of modern entrepreneurship. Therefore, mastery of technology and digital skills can be one of the keys to entrepreneurial success, helping individuals to adapt to rapid changes in the increasingly technology-dependent business world.

Along with the importance of digital skills in modern entrepreneurship, the influence of entrepreneurial character on entrepreneurial ability does not show a significant relationship. The results of the hypothesis test revealed that although entrepreneurial character is an essential factor, there is no significant influence between the character and overall entrepreneurial ability, which may indicate that other factors are more dominant in influencing the development of entrepreneurial ability.

Based on the results of the hypothesis testing, it shows that there is no significant influence between *latern_var1* (entrepreneurial character) and *latern_var2* (entrepreneurial ability), with a path coefficient of $\beta = 0.000$, $p = 0.193$, and $T = 1.303$. A p-value greater than 0.05 indicates that the relationship between these two variables is not statistically significant. Thus, although these two variables are in the same model and may be conceptually related, these results indicate that entrepreneurial character and entrepreneurial ability do not directly influence each other in the context of this analysis.

Entrepreneurial character can influence how an individual thinks and acts in an entrepreneurial context, and entrepreneurial ability relates to the skills and knowledge required to run a business, the two do not show a direct relationship in this model. There may be other factors, both internal and external, that play a greater role in shaping these two variables, or a more complex relationship involving mediation or moderation by other factors that have not been identified in this model. Although these results indicate the absence of a direct effect between entrepreneurial attitudes and ability, this does not diminish the importance of both variables in the context of entrepreneurship. Positive entrepreneurial character can motivate individuals to develop the necessary entrepreneurial skills, while entrepreneurial ability itself remains an important factor in running and managing a business. Therefore, although there is no direct relationship between the two, both remain key elements in the broader ent-

repreneurial process.

Ability & effort have a significant relationship with entrepreneurial character (*latern_var1*), although the effect is relatively small. Increasing ability and effort can contribute to the development of entrepreneurial character, but the impact is not dominant. In addition, intellectual skills also show a significant influence on entrepreneurial character, although their contribution is smaller than other variables. Emotional skills are proven to have a strong influence on entrepreneurial ability, which emphasizes the importance of individual ability in managing emotions and interpersonal relationships in the world of entrepreneurship.

Meanwhile, spiritual skills, although contributing to entrepreneurial ability, have a relatively weak influence. On the other hand, digital skills have been shown to have a significant influence in improving entrepreneurial ability. This shows the importance of mastering technology in the increasingly developing business world. The results of the study also show that although entrepreneurial character is important, there is no direct significant influence between character and entrepreneurial ability, indicating that other factors may be more dominant in shaping both variables.

CONCLUSION

Entrepreneurship development is recommended to strengthen the ability and effort through training programs that emphasize the improvement of these skills, although the impact is small. The development of intellectual skills and emotional skills should also be an important part of the entrepreneurship curriculum, because both of these skills help individuals in making smart decisions and managing the challenges of the business world. In addition, digital skills should be introduced more deeply in entrepreneurship education to ensure that students can adapt to rapid technological developments. Spiritual skills contribute more limitedly but can be developed to form ethical and sustainable entrepreneurial

characters. Further research is needed to explore possible mediating or moderating factors, considering that no direct relationship was found between character and entrepreneurial abilities in this study.

This research has several limitations, such as the limitations of the model used which does not consider external factors or complex interactions between these variables. The measurement of several variables can also be further deepened to increase their validity and reliability. Additionally, the sample used was limited to private teacher training colleges, which may not be fully representative of the broader entrepreneurial population, so research with a more diverse sample is highly recommended.

Practically, the results of this research can provide guidance for higher education institutions, especially private teacher training institutions, to design curricula that are more integrated with technology and focus on developing entrepreneurial skills. Educational institutions can utilize the results of this research to improve student competency through technology-based training, strengthening digital skills, and developing managerial abilities. Apart from that, the practical implications can also be used by policy makers to encourage collaboration between education and industry in providing entrepreneurship training that is relevant to market needs. For students, this research provides insight into the importance of developing digital skills and adaptive abilities to face challenges in the dynamic business world. Further research also needs to consider external factors that may affect entrepreneurship, such as market conditions or government policies. Finally, the relationship between attitudes and entrepreneurial ability may be more complex, involving mediators or moderators that have not been identified in this model, so further analysis needs to be conducted.

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