

Entrepreneurial Mindset among Students of Southern Zone Community Colleges: Gender, Age, and Study Program

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Abstract

The Community College's goal is to produce skilled individuals with an entrepreneurial mindset and self-potential to face various challenges and obstacles. The entrepreneurial mindset of community college students needs to change from job seekers to job creators. However, community college students are less confident and have limited exposure to digital marketing elements. The aim of this study is to examine the gap between digital literacy and entrepreneurial efficacy in developing community college students with an entrepreneurial mindset. The objective of this study is also to identify the level of digital literacy, efficacy, and entrepreneurial mindset of community college students in the Southern Zone. In addition, to test the differences in entrepreneurial mindset based on gender, age, and program of study among community college students in the Southern Zone. A quantitative descriptive research method was used, with a random sample of 386 students. Data analysis involved descriptive analysis to determine the levels of digital literacy, entrepreneurial effectiveness, and entrepreneurial thinking among students, as well as inferential analysis to analyze differences in entrepreneurial thinking based on gender, age, and program of study. The results of the study show that students have high levels of entrepreneurship, digital literacy, and entrepreneurial thinking. Entrepreneurial effectiveness is moderately high. Kruskal-Wallis test shows no significant differences in entrepreneurial thinking based on age, gender, and program of study. The implications of this study can help the management of Polytechnic Education Department and Community Colleges in improving entrepreneurial effectiveness among students through entrepreneurial activity planning, curriculum development, as well as teaching and learning strategies.

Keywords: Entrepreneurial Mindset, Digital Literacy, Self-Efficacy, Quatitative, Community College

Introduction

Advanced countries such as the United States, Germany, and Japan have proven that entrepreneurship can revitalize a country's economy (Kirby, 2004; Luthje & Franke 2003;

Salleh et al., 2005; Armanurah et al., 2011; Abubakar, 2016; Silva, 2021). Global economic growth is projected to grow by 3.4% in 2022 (Global Economic Performance in 2022). Entrepreneurship activities are seen as an important driver for job growth, economic dynamism, and innovation in European countries (Rusu, 2017). Entrepreneurship is also a new path for the sustainability of human and economic well-being (Wang et al., 2020). The competitiveness of the economy and the well-being of individuals depend on an educated society, where universities and academic staff play a crucial role in the student learning process (Brigmane, 2018). In the digital era, digital literacy (DL) is crucial. Having DL can help individuals navigate and master digital technology (Van et al., 2020). It can also develop business networks and marketing (Sariwulan et al., 2020).

Community colleges are educational institutions under the Ministry of Higher Education (KPT) with a total of 105 community colleges nationwide, offering 39 certificate level programs and 17 diploma programs (Community Colleges, 2021). In line with the aspirations of KPT and the goals of community colleges, one of them is to produce skilled and entrepreneurial individuals (Abdul Halim et al., 2012; Hassan et al., 2013; Shaharizat et al., 2014). The mindset of entrepreneurship among higher education students, including community college students, needs to be changed from being job seekers to job creators. This effort is crucial due to the limited job opportunities in the market compared to the number of graduates produced by higher education institutions every year. Therefore, students need to be prepared for the possibility of not getting a job. In such situations, they should not despair but have the spirit and ability to start and engage in entrepreneurship (Naumann, 2017). At the same time, the decreasing number of entrepreneurial graduates makes it difficult to balance the supply and demand of the workforce in various sectors (Graduate Tracking Study Report 2021). The abundance of graduates without value-added skills and choosing jobs makes employers more selective in choosing potential employees (Puad, 2020).

Various entrepreneurship activities and programs are continuously exposed to community college students (Azreen, 2019). Students need to change their behavior and way of thinking to have a high and complex entrepreneurial mindset in order to become entrepreneurs (Armanurah et al., 2015). Developing an entrepreneurial mindset among students can help them face the world of work and industries after graduation (Aida, 2022). In starting a business, an individual's desire to become an entrepreneur influences their actions (De Clercq et al., 2013). Students' inclination towards entrepreneurial careers depends on their entrepreneurial efficacy (Siti Hawa, 2009). The readiness of students in terms of knowledge, skills, and internal strengths such as emotions, beliefs, and self-efficacy is a key aspect of success in becoming an entrepreneur (Norsyafira, 2022). Students with entrepreneurship knowledge will show a high interest in entrepreneurship (Hermawan et al., 2016). However, students with low self-confidence are the cause of the lack of involvement of community college graduates in entrepreneurship (Sarmila, 2021).

To realize the aspirations and recommendations of the Ministry of Higher Education, self-potential or self-ability is very important for students to face various challenges (Ching, 2015). The fear of failure rate in Malaysia is ranked 4th among other countries such as Thailand, Indonesia, and Vietnam (Global Entrepreneurship Monitor (GEM) Report 2022). The percentage obtained by Malaysia is 44.95%. One factor that causes people to not be involved in entrepreneurship is a lack of self-confidence (Nor Aishah et al., 2018). Not only are students not confident in entrepreneurship itself, but they are also not confident in venturing into it (Yohana et al., 2019). An individual's self-confidence to achieve a goal is self-efficacy (Barbaranelli et al., 2019). Self-efficacy is the quality of a person's belief in their own skills to

fulfill responsibilities and achieve goals (Ormrod, 2006). The higher the entrepreneurial efficacy of students, the higher the likelihood of them starting a business after graduation (Norshafira, 2022). However, a low level of entrepreneurial efficacy will make students consider their own inability as the cause of failure (Erikson, 2003). In the minds of graduates, becoming an entrepreneur requires a high commitment in

Literature Review

Digital Literacy

Digital literacy (DL) refers to the awareness, confidence, and ability of an individual to use digital tools and facilities correctly. Its goal is to identify, access, manage, integrate, evaluate, analyze, and synthesize digital sources, build new knowledge, create media expressions, and communicate with others in specific situations in life (Honig & Martin, 2014). In Beetham, Littlejohn, and McGill's study, there are seven elements of digital literacy JISC (2017), namely information literacy, digital scholarship, learning skills, ICT literacy, career and identity management, communication and collaboration, and media literacy.

DL is important for students and serves as a foundation for technological advancement. It enhances students' competitiveness and offers better opportunities in the digital world (Baterna et al., 2020). Moorthy's study (2021) states that IPT students need to be aware of the importance of improving digital marketing literacy, which will influence their entrepreneurial behavior if they venture into entrepreneurship. A study conducted by Nor Asiah (2018) shows that self-efficacy can help students become more proficient in digital literacy to enter the business and entrepreneurial field.

Therefore, the National Plan for Higher Education Development in Malaysia (2015-2025) and the aspirations of the Department of Community College Studies with the concept of "Doing Business While Study" (DBWS) has been established (Azila, 2016). The use of the DBWS concept is in line with the establishment of the Digital Entrepreneurship (DE) course, which aims to provide students with the ability to use digital marketing methods in business among community college students (Zaini, 2019). Payton and Hague's study (2010) suggests that developing digital literacy alongside knowledge of Digital Entrepreneurship (DE) can provide students with opportunities to use various digital technologies creatively, critically, and collaboratively. Digital literacy related to entrepreneurship has a significant impact on an individual's behavior (Moorthy, 2021).

Entrepreneurial Self-Efficacy

Entrepreneurial self-efficacy is an important component in building self-confidence. The concept of self-efficacy stems from social cognitive theory (Ngugi et al., 2012). This theory, proposed by Bandura (1985), suggests that individual behavior is developed through various activities such as interpersonal interactions and involvement in situations. The relationship between these activities can shape a person's belief in their ability to perform certain behaviors and their expectations of behavior outcomes (Nowinski et al., 2019). Maija's study (2017) defines self-efficacy as the level at which individuals perceive themselves to have the ability to successfully perform different roles.

Drnovšek et al.'s study (2010) states that entrepreneurial efficacy has a positive impact on business creation. Ho et al (2018); Norasmah (2017); Rosna & Norasmah (2018) emphasize the need to cultivate entrepreneurial self-efficacy among entrepreneurship training program students. Peterman's study (2000) found that the perception of the possibility of starting a business significantly increases through participation in entrepreneurship programs.

Moreover, individuals who view entrepreneurship education as a positive experience show higher feasibility scores than those who view it as a negative experience. Gender interaction is also important for entrepreneurial self-efficacy in education, with women requiring more education than men (Chowdhury & Endres, 2005). Norsida Man's study (2008) states that 95.7% of youth respondents aged 16 to 40 agreed that high entrepreneurial self-efficacy levels can enhance their confidence in the field of entrepreneurship.

Entrepreneurial Mindset

Mindset is a person's ability to think, analyze, and conclude based on their perspective. Each individual has different thoughts depending on their respective perspectives (Fajrillah, 2020). Mindset also influences a person's attitudes and beliefs to determine their behavior, views, attitudes, and future (Gunawanin, 2021). Entrepreneurial mindset is an ever-changing process of vision, change, and creation that motivates people to achieve goals (Kuratko et al., 2016). According to The Ice House Entrepreneurship Program, an entrepreneurial mindset is the foundation of beliefs and assumptions that encourage behaviors that enable entrepreneurs to succeed. Everyone can benefit if they understand and apply an entrepreneurial mindset in any situation that demands change in life. McGrath & MacMillan's study (2000) states that the foundation of an entrepreneurial mindset is action-oriented, not procrastinating, being prepared to learn new things, networking, expanding business scope, diligently seeking new alternatives, and seizing opportunities with high discipline.

Furthermore, the concept of entrepreneurial mindset goes beyond cognitive psychology and organizational theory. Gupta & Govindrarajam (2002) formulated it as a human capacity to process limited surrounding information. However, entrepreneurial mindset and entrepreneurial thinking are two different yet closely related concepts in the context of entrepreneurship

Research Methodology

Research Design

This study is a quantitative descriptive study in the form of a survey that uses a questionnaire as the research design. According to Cresswell (2008), quantitative research is a type of research where subjects are selected, questions are formulated, question scope is limited, statistics are used, and questions are made objectively.

Populations and Sampling of the Study

The simple random sampling technique was used to identify the sample. The sample consists of students from Semester 1, Semester 2, and Semester 3 of South Zone Community Colleges. The population size for the three states in the South Zone with 23 Community Colleges is 5765 students (Community College Management System Report (CCMS) JPPKK, 2023). A total of 361 samples were selected to meet the sample size requirements based on the sampling determination method by Krejcie & Morgan (1970) and achieve the minimum sample size. According to Cresswell (2014), a larger sample size can reduce sampling errors. Therefore, the researcher increased the sample size by 7 percent from the number of samples, resulting in a sample size of 25 and a total of 386 samples consisting of students from South Zone Community Colleges.

Research Instrument

This study is a quantitative descriptive study in the form of a survey using a questionnaire as the research instrument. This research instrument was used to collect data related to digital literacy, self-efficacy, and entrepreneurial mindset among students of South Zone Community Colleges. The questionnaire was given to students and distributed through communication media such as WhatsApp and Telegram.

The research instrument used in this study is a questionnaire. The questionnaire is structured and uses the Likert Scale as the choice of answers. The use of a five-point Likert Scale is appropriate because it is easy to administer to a large sample, helps respondents focus on the topic being studied, and facilitates data scheduling and analysis (Jonald, 2010). The structure of the questionnaire is divided into four sections, namely Sections A, B, C, D. Section A consists of demographic questions about the respondents, which includes seven questions. Section B consists of questions about the level of digital literacy among students, which includes 11 questions using indicators from the study "Do Digital Literacy and Digital Entrepreneurship among University Students Contribute to Digital Economy?" conducted by (Primahendra, 2021). Section C consists of questions about the level of self-efficacy in entrepreneurship among students, which includes 17 questions. The Instrument for Correlation of Self-Efficacy Entrepreneurship and Pre-University Students' Entrepreneurial Tendency was used in this study, adapted from the study by Rosna & Norasmah (2018). Section D consists of questions to assess the entrepreneurial mindset of students, which includes 13 questions. The Instrument for Pre-University Entrepreneurial Mind was used in this study, adapted from the study by (Norasmah and Amal, 2021).

The Statistical Package for Social Sciences (SPSS) program was used to analyze this study. Table 1 shows the minimum scores interpreted based on a five-point Likert Scale modified from (Chew & Zul Hazmi, 2018). This interpretation will be further discussed in the findings section. The researcher obtained permission from the Head of Research and Innovation Unit of the Polytechnic and Community College Department (JPPKK) as well as the Chairman of the South Zone Community Colleges to conduct and distribute the Questionnaire to all students of South Zone Community Colleges. The students were provided with the Questionnaire link through the Deputy Director of Academic Affairs, Program Manager, and Academic Advisor of each Community College in their respective states to enable them to answer the questions. The data obtained were analyzed using descriptive analysis to assess frequency, percentage, minimum, and standard deviation. Inferential analysis using the "Independent T-Test" and "One-Way ANOVA" tests was used to compare entrepreneurial mindsets based on gender, age, and study program of students in South Zone Community Colleges.

Table 1

Interpretation of Mean Score

MIN SCORE	INTERPRETATION
1.00 - 2.00	Low
2.01 - 3.00	Medium Low
3.01 - 4.00	Medium high
4.01 - 5.00	Height

A Pilot Study

Pre-study research is conducted to determine whether the research instrument can produce the necessary data to achieve the research objectives. Before the actual study is conducted,

issues with the research instrument can be identified and improved through pre-study research. The pre-study research took one week and involved the distribution process of survey forms online using Google Form. A total of 45 students from Community Colleges in three southern zone states, namely Melaka, Johor, and Negeri Sembilan, were randomly selected.

The survey questionnaire was tested using the Alpha Cronbach method to assess its reliability. Sekaran (2003) states that survey questionnaires tested using the Alpha Cronbach method should have a reliability value of 0.70 or higher for instruments with ten or more items. This means that the distributed questions have been proven valid and easily understood by respondents.

Table 2

Reliability values by construct

Variables	Croanbach Alpha value
Digital Literacy	0.919
Entrepreneurial Self-Efficacy	0.922
Entrepreneurial Mind	0.881

The validity and reliability of the instrument are ensured to ensure the accuracy of the measurements. Gay et al (2011) define validity as what needs to be measured, and reliability as the consistency of a measuring instrument in measuring what is intended to be measured. Two expert panels were appointed to assess and examine the items in terms of content and objectives to be measured (Ary et al., 2010). These experts are lecturers in the field of business and entrepreneurship who have experience in their respective institutions. Item assessment is made for each item in the survey questionnaire in terms of content relevance, language appropriateness, item presentation arrangement, font size used, and measurement suitability. The Content Validation Index (CVI) is used to determine the Index of Content Validity. The average level of suitability is calculated through the expert's assessment of the instrument. Table 3 shows the CVI values assessed by the appointed experts. The average content validity index for each sub-dimension of this instrument is 0.75. However, values exceeding 0.8 indicate clear and high content validity (Shrotryia & Dhanda, 2019).

Table 3

Value of validity by experts

	Panel 1	Panel 2
Total CVI per expert	0.7	0.8
Overall CVI	0.75	

In addition, the panel of assessors stated that the statement items are easily understood, but there are some statements that contain double-barreled statements. For the entrepreneurial mindset, it is suggested to include the word "able to" in the statements provided. All improvement suggestions proposed by the panel of assessors have been corrected and implemented to enhance the quality of the research items.

Research Findings**Normality Test**

Before conducting the normality test, the Missing Data Analysis test in Statistical Package for The Social Science (SPSS) version 27 was carried out to identify missing information in the data collection, (Orchard & Woodbury, 1972). After identifying no missing data, the normality test was conducted to determine whether the data is normally distributed or not. For the normality test, the guidelines from Pallant (2011) were used to determine the normality criteria; skewness values. The analysis of normality test using skewness & kurtosis showed values ranging from -0.449 to 5.283. Therefore, this study's data has been proven to be non-normally distributed, allowing the Kruskal Wallis Test analysis method to be conducted to examine the differences in entrepreneurial mindset based on gender, age, and student program at South Zone Community College.

Respondent Demographics

Part A of this study's questionnaire focuses on the demographic background information of the community college student respondents. The analysis of this demographic explains the frequency and percentage of respondent profiles, including gender, ethnicity, community college, study program, semester, and academic year. A total of 386 respondents participated in this study. The distribution of frequency and percentage of respondent profiles based on demographic characteristics is described as follows.

The demographic profiles of South Zone Community College students, based on the number and percentage of respondents, are as follows: the percentage according to gender shows that male students account for 53.9% (208 individuals) while female students account for 46.1%, equivalent to 178 individuals. As for the breakdown of respondents by ethnicity, the Malay ethnicity recorded the highest percentage, with 92.7% (358 individuals), followed by the Indian ethnicity at 3.6% (14 individuals), while the Chinese ethnicity accounted for 2.3% (9 individuals). The percentage breakdown based on community college shows that 31.9% (123 individuals) of the respondents are from Masjid Tanah Community College, Melaka, while the colleges with the lowest percentage are Rembau Community College and Kuala Pilah Community College, Negeri Sembilan. In terms of study program, the highest percentage of respondents is from the Electrical Technology Program, at 21% (81 individuals), which is available at South Zone Community College. Meanwhile, the program with the lowest percentage is the Architectural Technology Certificate at 0.3% (1 individual). Based on this demographic profile, it can be concluded that most respondents who answered this questionnaire are male students in their first semester, of Malay ethnicity, who have just started their studies at the Community College.

Descriptive Statistical Analysis

First research question: Identifying the level of digital literacy (DL), self-efficacy, and entrepreneurial mindset of South Zone Community College students.

This section presents the level of digital literacy (DL), self-efficacy, and entrepreneurial mindset of South Zone Community College students based on the interpretation of scores adapted from (Chew & Zul Hazmi, 2018). Table 6 shows the minimum scores and standard deviations for the entrepreneurial variables of South Zone Community College students. For the digital literacy variable, the minimum score is 4.169 and the standard deviation is 0.476, indicating the highest level. For the self-efficacy in entrepreneurship variable, the minimum score is 3.892 and the standard deviation is 0.517. As for the entrepreneurial mindset

variable, the minimum score is 4.016 and the standard deviation is 0.465. Overall, the entrepreneurial elements of South Zone Community College students indicate a high level of 4.0 and above, involving digital literacy and entrepreneurial mindset. Meanwhile, self-efficacy in entrepreneurship is at a moderately high level.

Table 6

Mean score and Standard Deviation for the elements of the entrepreneurship variable of South Zone Community College students

No	Variable	Min	Standard Deviation	Level
1	Digital Literacy	4.169	0.476	Height
2	Entrepreneurial Self-Efficacy	3.892	0.517	Medium high
3	Entrepreneurial Mind	4.016	0.465	Height

The results of the descriptive analysis in Table 7 show that the digital literacy of students has a mean score of 4.169 and a standard deviation of 0.479. From the data, it can be seen that the digital literacy of students at Kolej Komuniti Zon Selatan is at a high level. This is proven by the responses to the eleven digital literacy items answered by the respondents. For example, item B10 (**I use information from digital platforms to integrate existing knowledge**) had the highest agreement percentage of 94.5% (365 people). On the other hand, item B3 (**I share knowledge through digital platforms**) had the highest disagreement percentage of 11.9% (46 people). Although there are students who do not share knowledge through digital platforms, the majority of students use digital platforms to seek information to enhance their existing knowledge. This proves that the level of digital literacy among students at Kolej Komuniti Zon Selatan is high.

Table 7

Digital Literacy

ITEMS	STATEMENT	Strongly disagree	Do not agree	Disagree	Agreed	Strongly Agree
B1	I search for data through digital platforms	(1.0 %) 4	(0.8%) 3	(6.7%) 26	(62.4 %) 241	(29.0%) 112
B2	I search for information through digital platforms	(0.5 %) 2	(0.3%) 1	(5.4%) 21	(59.8%) 231	(33.9%) 131
B3	I share knowledge through digital platforms	(0.3 %) 1	(1.0%) 4	(10.6%) 41	(65.0%) 251	(23.1%) 89
B4	I share information through digital platforms	(0.3 %) 1	(1.0%) 4	(9.1%) 35	(67.9%) 262	(21.8%) 84
B5	I store information through digital platforms	(0.8 %) 3	(0.0%) 0	(8.5%) 33	(62.4%) 241	(28.2%) 109
B6	I manage information through digital platforms	(0.3 %) 1	(0.0%) 0	(9.8%) 38	(65.8%) 254	(24.1%) 93
B7	I disseminate information through digital platforms	(0.8 %) 3	(1.0%) 4	(9.6%) 37	(62.7%) 242	(25.9%) 100
B8	I utilize information from digital platforms to enhance existing knowledge	(0.3 %) 1	(0.5%) 2	(5.2%) 20	(62.4%) 241	(31.6%) 122
B9	I utilize information from digital platforms to apply existing knowledge	(0.3 %) 1	(0.3%) 1	(6.0%) 23	(66.6%) 257	(26.9%) 104
B10	I utilize information from digital platforms to integrate existing knowledge	(0.3 %) 1	(0.8%) 3	(4.4%) 17	(68.1%) 263	(26.4%) 102
B11	I utilize information from digital platforms to redesign existing knowledge	(0.3 %) 1	(0.5%) 2	(7.3%) 28	(67.1%) 259	(24.9%) 96
	Min Score	4.169				
	Standard deviation	0.479				

Furthermore, Table 8 shows that the entrepreneurial self-efficacy of students at Kolej Komuniti Zon Selatan has a minimum score of 3.892 and a standard deviation of 0.517. Based on the obtained minimum score, the level of entrepreneurial self-efficacy is at a moderately high level between 3.01 and 4.00. Seventeen items were used to measure the self-efficacy of students at Kolej Komuniti. Item D4 (**I believe that success in business can improve one's status**) had the highest agreement percentage of 93.2% (360 people). This shows that the majority of students have high confidence in the success of business and believe that it can improve their status. On the other hand, item D7 (**I have enough knowledge to start a business after completing my studies**) had the highest disagreement percentage of 34.5% (133 people). Based on the research findings, a small number of students do not believe that they have enough knowledge to start a business after completing their studies. This indicates that most students at Kolej Komuniti Zon Selatan believe that they have sufficient knowledge to start a business after completing their studies. However, there is still a small number who

are unsure about their entrepreneurial skills. Therefore, efforts should be made to enhance knowledge and entrepreneurial skills among students to prepare them for success in business after graduation.

This shows that there is still room for improvement in providing students with sufficient knowledge in entrepreneurship. The level of self-efficacy among students at Kolej Komuniti Zon Selatan is still at a moderately high level.

Table 8

Entrepreneurial Self-Efficacy

ITEMS	STATEMENT	Strongly disagree	Do not agree	Disagree	Agreed	Strongly Agree
D1	I am striving to start a business after completing my studies	(1.6 %) 6	(4.1%) 16	(19.2%) 74	(62.4 %) 241	(12.7%) 49
D2	I believe I can succeed in business with diligent effort	(0.8 %) 3	(0.8%) 3	(7.5%) 29	(66.1%) 255	(24.9%) 96
D3	I believe that success in business can enhance one's prestige	(0.5 %) 2	(0.3%) 1	(7.8%) 30	(67.1%) 259	(24.4%) 94
D4	I believe that success in business can enhance one's status	(0.8 %) 3	(0.3%) 1	(5.7%) 22	(67.6%) 261	(25.6%) 99
D5	I am confident in achieving success in a five-year business project	(1.0 %) 4	(1.3%) 5	(18.1%) 70	(62.0%) 247	(15.5%) 60
D6	I am confident in discussing business ideas	(1.0 %) 4	(0.5%) 2	(15.3%) 59	(69.2%) 267	(14.0%) 54
D7	I have sufficient knowledge to start a business after completing my studies	(1.6 %) 6	(4.4%) 17	(28.5%) 110	(54.7%) 211	(10.9%) 42
D8	I believe I can successfully implement all planned business strategies	(0.8 %) 3	(1.8%) 7	(17.4%) 67	(67.4%) 260	(12.7%) 49
D9	I am confident in generating business ideas effectively	(0.8 %) 3	(1.6%) 6	(15.3%) 59	(69.4%) 268	(13.0%) 50
D10	I am confident in identifying business opportunities effectively	(0.8 %) 3	(1.8%) 7	(17.4%) 67	(67.9%) 262	(12.2%) 47
D11	I am able to estimate the initial capital required to establish a business	(1.8 %) 7	(3.4%) 13	(24.9%) 96	(59.3%) 229	(10.6%) 41
D12	I am capable of executing all business ventures effectively	(0.8 %) 3	(1.8%) 7	(23.1%) 89	(63.7%) 246	(10.6%) 41
D13	I am confident in resolving issues if my business plan does not go as intended	(1.0 %) 4	(1.0%) 4	(20.7%) 80	(65.8%) 254	(11.4%) 44

D14	I believe I can overcome obstacles if the business plan does not go as planned	(0.8 %)	(1.6%)	(23.6%)	(64.2%)	(9.8%)
		3	6	91	248	38
D15	I am capable of starting a business while still studying	(1.0 %)	(4.9%)	(25.9%)	(56.7%)	(11.4%)
		4	19	100	219	44
D16	I am certain that I can overcome the challenges of starting a business	(1.0 %)	(2.1%)	(21.2%)	(65.0%)	(10.6%)
		4	8	82	251	41
D17	I am confident in performing tasks well even in difficult situations	(0.8 %)	(1.8%)	(16.8%)	(68.7%)	(11.9%)
		3	7	65	265	46
Min Score		3.892				
Standard deviation		0.517				

Lastly, Table 9 relates to the entrepreneurial mindset of students at Kolej Komuniti Zon Selatan, which has a minimum score of 4.019 and a standard deviation of 0.465. This shows that the level of entrepreneurial mindset among students is high. There are thirteen items related to the entrepreneurial mindset, which include six elements of skills in entrepreneurship: decision-making skills, problem-solving skills, opportunity-seeking skills, willingness to take risks, innovative and creative skills, and teamwork skills. For item E9 (**I take responsibility for the decisions I make**), the highest agreement percentage was 93.2% (360 people). On the other hand, item E6 (**I search for information about entrepreneurial opportunities**) had the highest disagreement percentage of 20.4% (79 people). Based on these findings, it is found that students have entrepreneurial characteristics in terms of mindset, but in terms of seizing opportunities, making decisions and plans, generating creative ideas, and communication skills, students are still weak. Nevertheless, the majority of students have a high level of entrepreneurial mindset.

Table 9

Entrepreneurial Mind

ITEMS	STATEMENT	Strongly disagree	Do not agree	Disagree	Agreed	Strongly Agree
E1	I am very meticulous when making any decision.	(0.8 %) 3	(0.5%) 2	(11.4%) 44	(66.8 %) 258	(20.5%) 79
E2	I make decisions rationally (without following emotions).	(1.8 %) 7	(0.8%) 3	(16.1%) 62	(64.2%) 248	(17.1%) 66
E3	I identify the root cause of problems clearly	(0.8 %) 3	(1.0%) 4	(15.3%) 59	(64.2%) 248	(18.7%) 72
E4	I plan strategies to resolve problems.	(0.5 %) 2	(0.8%) 3	(11.9%) 46	(68.1%) 263	(18.7%) 72
E5	I identify potential obstacles in problem-solving.	(0.5 %) 2	(0.5%) 2	(11.1%) 43	(69.9%) 270	(17.9%) 69
E6	I search for information about entrepreneurial opportunities.	(1.0 %) 4	(1.8%) 7	(17.6%) 68	(64.2%) 248	(15.3%) 59
E7	I make program selection choices based on entrepreneurship opportunities in the chosen field of study.	(0.5 %) 2	(0.5%) 2	(12.2%) 47	(69.2%) 267	(17.6%) 68
E8	I am willing to face any obstacles in the efforts undertaken.	(0.8 %) 3	(0.5%) 2	(8.8%) 34	(70.7%) 273	(19.2%) 74
E9	I am responsible for the decisions made.	(0.3 %) 1	(0.0%) 0	(6.5%) 25	(71.2%) 275	(22.0%) 85
E10	I am able to generate more creative ideas to solve problems.	(0.3 %) 1	(1.3%) 5	(16.8%) 65	(67.1%) 259	(14.5%) 56
E11	I enjoy creating something new.	(0.3 %) 1	(0.8%) 3	(11.4%) 44	(69.2%) 267	(18.4%) 71
E12	I am more committed when working together.	(0.5 %) 2	(0.3%) 1	(14.8%) 57	(64.8%) 250	(19.7%) 76
E13	I can communicate effectively, which allows me to build a social network with many people.	(0.8 %) 3	(1.0%) 4	(14.5%) 56	(66.6%) 257	(17.1%) 66
	Min Score	4.019				
	Standard deviation	0.465				

Statistical Inference Analysis

The second research issue is testing the difference in entrepreneurial mindset based on gender, age, and student program at South Zone Community College.

Inferential analysis is used to examine the difference in entrepreneurial mindset based on gender, age, and student program at South Zone Community College. To test the difference in entrepreneurial mindset based on gender, the Mann-Whitney U test is used. Table 10 shows that the Mann-Whitney U value is 18346.5, which reflects the comparison between two groups of data tested using the Mann-Whitney U test. Meanwhile, the obtained z score of -0.155 indicates the magnitude of the difference between the U value and the mean and standard deviation. Based on the findings of the study, the negative z score indicates that the U value is below the expected minimum value. This shows a significant difference between the two groups of tested data. Overall, the Mann-Whitney U test results indicate a significant difference between the male and female groups ($U = 18346.5$, $z = -0.155$, $p < 0.05$).

Table 10

Mann Whitney U test of differences in Entrepreneurial Minds against gender

	Gender
Mann-Whitney U	18346.5
Wilcoxon W	34277.5
Z	-0.155
P	0.877

The Kruskal-Wallis Test is used to find differences in non-normally distributed data. The Kruskal-Wallis test, referred to as the Kruskal-Wallis H test, is a non-parametric alternative to one-way analysis of variance between groups. Table 11 shows the findings from the Kruskal-Wallis test for the difference in entrepreneurial mindset based on age groups and student programs. The Kruskal-Wallis test reveals that both groups have a significance level greater than 0.05 ($\text{sig} = 0.05$, $p > 0.05$). This means that there is no statistically significant difference in entrepreneurial mindset among the three elements based on gender ($\text{sig} = 0.877$, $p > 0.05$), age ($\text{sig} = 0.216$, $p > 0.05$), and student program ($\text{sig} = 0.207$, $p > 0.05$) at South Zone Community College.

Table 11

Kruskall - Wallis test of differences in Entrepreneurial Minds with regard to age and study program

Kruskal-Wallis	Age	Study program
N	386	386
Statistical Test	4.464	23.723
Df	3	19
Asymp. Sig (2-tailed), p	0.216	0.207

Discussion of Research Findings

The purpose of the conducted study is to identify the level of digital literacy, entrepreneurial mindset, and differences in entrepreneurial mindset based on gender, age, and study program among students of South Zone Community Colleges. Based on the research findings, students have a high level of digital literacy and entrepreneurial mindset because they are aware of the importance of digital literacy in today's world. This is in line with the study by

Hafizah (2017) which states that the level of digital literacy and entrepreneurial mindset among students is high, and is supported by the study by Shiyuti & Al-Habshi (2018), which states that a high level of entrepreneurial mindset is important for venturing into entrepreneurship. The study by Nurazzura (2022) also states that students need to participate in digital entrepreneurship and are encouraged to seek opportunities, act fast, take risks, collaborate with others, be creative, and find ways to solve new issues faced by society in the digital age. Furthermore, the study by Nor Asiah et al. (2018) states that the digital influence can increase students' desire to become entrepreneurs. The use of technology can also encourage individuals to pursue careers in digital business (Oppong et al., 2020).

On the other hand, the level of self-efficacy in entrepreneurialism among students of South Zone Community Colleges is still at a moderate to high level. This may be due to the lack of a positive relationship between educational support factors and students' interest in entrepreneurship. Nurzulaikha (2021) states that educational support factors through curriculum and co-curricular components, as well as pedagogy, are crucial in increasing students' interest in entrepreneurship. The study by Norshafira (2022) also suggests that the higher the entrepreneurial self-efficacy of a student, the higher the potential for the student to practice entrepreneurship as a career after graduation.

The research findings from the Kruskal-Wallis test show that the difference in entrepreneurial mindset based on gender between male and female students is not significant. This indicates that male and female students have similar entrepreneurial mindset characteristics. This is supported by the study by Azmi et al. (2012) which found that male and female students do not have significant differences in entrepreneurial traits. Similarly, there are no differences in entrepreneurial mindset based on age and study program. This shows that factors such as age and choice of study program do not affect an individual student's entrepreneurial mindset. This is supported by the study by Najmi (2020) which states that discipline, motivation, and student behavior are the main factors that influence students' decision to choose entrepreneurship as a career. These elements can enhance students' entrepreneurial mindset and can transform community college students from job seekers to job creators.

Conclusions and Implications

In conclusion, it shows that the entrepreneurship of students at South Zone Community College has a strong global element. This global element refers to the skills possessed by students such as digital literacy skills. The study reports that students at South Zone Community College have high digital literacy skills, which are necessary skills in the era of globalization. In addition to having digital literacy skills, students are found to have knowledge to start a business, possess a proactive and competitive attitude. All three elements are important for them to face the demands of the global market. However, despite students having an entrepreneurial mindset, there are also weaknesses in practical skills such as seizing opportunities, making decisions, planning, generating creative ideas, and communication skills. These weaknesses need to be addressed to enhance entrepreneurial potential and prepare students to face global challenges in entrepreneurship. The study findings show that the entrepreneurial mindset of students at South Zone Community College is the same, regardless of gender, age, and study program.

The results of this study can have an impact on the Ministry of Higher Education Malaysia, particularly the Entrepreneurship Development Center of Polytechnics and South Zone Community Colleges. In addition, the study findings can be utilized by the Department of Polytechnic and Community College Education (JPPKK) in designing student entrepreneurship

development programs to enhance students' entrepreneurial self-efficacy. The findings can also be used as a guide when planning activities related to educational support factors in entrepreneurship activities, curriculum, teaching, and learning. There are several limitations in this study that need consideration in future research. The study findings only focus on students at Community Colleges in the southern region of the country. Therefore, for future studies, the population of Community College students can be taken into account throughout Malaysia to obtain accurate findings.

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