

Research Article

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Author for correspondence:

Bakare Kazeem Kayode

✉ bakare.kayode@aiu.edu.my

✉ School of Education and Human Sciences
Albukhary International University (AIU), Jalan
Tun Abdul Razak, 05200, Alor Setar
Kedah Darul Aman, Malaysia

The Impact of Economic Literacy Components on Entrepreneurship Potential Among Secondary School Students in Sik, Kedah

Bakare Kazeem Kayode^{ID}, Kalthom Husain^{ID}, Osaid N A Abdaljawwad^{ID}

Abstract

Background/purpose. Entrepreneurs are the catalyst of change, innovation, and growth in any country. The contribution of entrepreneurship activities to the growth and prosperity of any nation is undeniably affirmed. Nurturing entrepreneurship potential to sustain the important national advancement activities has not been given sufficient attention in the secondary years of schooling. Thus, in society today, there are more job seekers (workers) than job creators (entrepreneurs). One factor contributing to the downward trajectory in the number of entrepreneurs, especially in the underserved society, is inadequate knowledge of economic indices. This study examines the influence of economic literacy, with an emphasis on financial literacy components and awareness of the Economic Report, on the entrepreneurial potential of secondary school students in Sik, Kedah, Malaysia.

Materials/methods. This study employed a quantitative research approach and a cross-sectional design. Data were collected through surveys administered on Form 4 secondary school students, assessing their levels of financial literacy, comprehension of the Economic Report, and entrepreneurial potential. Data analysis was conducted using SmartPLS 4.3 software to evaluate the relationships between financial literacy, economic awareness, and entrepreneurship potential.

Results. The findings show that financial literacy and awareness of economic indicators significantly influence students' entrepreneurial potential. Furthermore, the findings depict that financial literacy has a more substantial impact on entrepreneurship potential. The result of instrument validation indicates that the entrepreneurship potential scale is unidimensional, while the economic literacy scale is multi-dimensional.

Conclusion. This research contributes to the literature by providing empirical evidence on how financial literacy and economic knowledge shape entrepreneurial aspirations and capabilities among youths in Sik, Kedah. Higher financial literacy and reading of economic reports will increase the student's potential to become an entrepreneur. The insights derived from this study offer valuable implications for policymakers and educators in designing targeted interventions that promote entrepreneurial mindsets.



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1. Introduction

Entrepreneurship is a catalyst for any nation's growth, development, and economic stimulus. It is the foundation and engine of business, innovation, and creativity (Sagar et al., 2023). The Global Entrepreneurship Monitor (GEM) global report of 2024 indicated the critical role of entrepreneurship in promoting "societal health and wealth". Economic activities both at macro, meso, and micro levels are very germane in determining the success or failure of an enterprise. Therefore, it is essential to expose students at a young age to basic economic factors that propel entrepreneurship aspiration and success in business. As such, teaching and learning economic literacy and entrepreneurial potential are critical parts of education for students. These variables (economic literacy and entrepreneurship potential) are instrumental in providing students with the necessary skills and knowledge needed to traverse the intricacies and complexities of the modern economy. Globally, there seems to be a convergence of thought among education stakeholders on the need to embed entrepreneurial skills, knowledge, and economic literacy into the academic curriculum (Rao & Sri, 2015). This paradigm shift in the thought of education stakeholders reflects the economic and social reality unfolding around the world. This reality speaks to the fact that society now needs more job creators to tame the endemic rate increase in unemployment and credential inflation. So, the inclusion of economic literacy components into the curriculum of secondary school will not only be a critical success factor for personal financial well-being but also a catalyst for innovation, economic growth, and tackling socioeconomic issues in society—countries with huge economic development leverage entrepreneurship activities in driving revenue and job creation. For instance, entrepreneurs and small business owners play a very significant role in the development of the United States economy (Popkin, 2007). Small and medium-scale enterprises (MSMES) contribute half of the country's sales and gross domestic product (GDP). Entrepreneurs and small business owners are also the major employers of labour in the United States, with more than half of the total private labour force. Entrepreneurship is a viable tool that stimulates and accelerates economic growth and prosperity, which are witnessed in developed and developing countries (Sergi et al., 2019). Based on these views, entrepreneurship education and economic literacy are important areas of knowledge for young entrepreneurs in any given economy.

In Malaysia, efforts to improve economic literacy and entrepreneurship among school students have gained momentum recently. Since the mid-90s, the Malaysian government has implemented various initiatives to promote entrepreneurship education in schools, including incorporating entrepreneurship modules into the national curriculum as a degree program, a specialization, or a course. Current literature on economic literacy and entrepreneurship education in Malaysia often highlights the importance of adopting innovative teaching methods, integrating real-world experiences into the curriculum (Del Vecchio et al., 2021; Ranta et al., 2022), and fostering an entrepreneurial mindset from an early age (Ahmad, Idrus, & Rijal, 2023; Lanivich et al., 2021). Moreover, there is a growing emphasis on addressing socioeconomic disparities in access to entrepreneurship education and ensuring that underserved communities have equitable opportunities to develop their entrepreneurial skills (Wiramihardja et al., 2022). Unfortunately, this call has not been adequately heeded. Most of the entrepreneurship research is largely concentrated on the urban and city centers. Therefore, research on entrepreneurship that pays special attention to rural and underserved communities is necessary. In Malaysia specifically, researchers have called for greater collaboration between the government, educational institutions, and the private sector to create a more supportive ecosystem for youth entrepreneurship (Mohd Nafi et al., 2021) and to address the unique challenges faced by Malaysian students, such as access to funding and mentorship networks (Albakri et al., 2021). This study, therefore, aims to address the following questions to provide a clear pathway to steer the course of the research. Although previous studies have acknowledged the significance of economic education in developing students' financial literacy

and enhancing their overall academic performance, there remains a considerable amount of research on how specific aspects of economic literacy, particularly financial literacy and the ability to interpret economic reports, affect students' inclination towards entrepreneurship. Most of the financial literacy and entrepreneurship research has largely clustered in cosmopolitan and metropolitan enclaves of many countries and higher education institutions, often neglecting underserved communities such as Sik and Kedah. This gap constrains the applicability and generalizability of the current findings across diverse educational environments and socioeconomic contexts. To address this gap, the present study poses two questions: (1) Is there a significant relationship between entrepreneurship potential and economic literacy, also referred to as financial literacy? and (2) Is there a significant link between entrepreneurship potential and economic literacy, or the ability to understand economic reports?

2. Literature Review

2.1. Context

Sik District is a district in Kedah, Malaysia. It is the largest district in Kedah. The district covers 1,634.56 km² of land with a population of 67,925 as of the year 2020. Sik is famous for the Muda River, the longest river in Kedah, and the Beris Dam. A popular attraction nearby is Beris Vineyard, which has attracted thousands of visitors since its opening. However, Sik is an agrarian area that consists predominantly of farmers, traders, and artisans. Sik is also inhabited by a high number of low-income communities in the Malaysian peninsula. More than eighty percent (82.36%) of households in Sik had low food access status and were prone to food desert areas (Ahmad Zubir Ibrahim, 2021). This district is considered an underserved community that requires awareness, sensitization, and interventions on entrepreneurship skills for its constituent young and working population.

2.2. Conceptualization of Economic and Financial Literacy

Defining economic literacy can be challenging, especially when it overlaps with related concepts like financial literacy. In this case, however, the study will use these lenses to understand the concepts of economic literacy and financial literacy. This ambiguity makes it difficult to provide a one-size-fits-all definition and comparisons, particularly when several studies have been conducted in different parts of the world and different languages (Zait & Berteau, 2015). For instance, financial literacy is a common term in Australia and the United States of America (Orton, 2007), whereas financial capability is the major term in Canada and Great Britain (Remund, 2010).

Nevertheless, for a comprehensive understanding of economic and financial literacy, this study relies on Johnson (2013), who defines economic literacy as “the ability to understand, identify, and evaluate economic concepts concerning personal finance, the economy, and political systems. Personal finance is a significant component of economic literacy, as a proxy to gauge financial literacy. As argued by Johnson, financial literacy is the ability to understand the use of money in society, including earning, managing investments, and donations. This argument suggests that financial literacy is a subset of economic literacy. This definition provides a reliable insight into understanding the concept of economic literacy from a narrow and broader perspective, taking into consideration the key issues. With this, students studying entrepreneurship must have a clear understanding and foundational knowledge in their curriculum to equip them with both theoretical knowledge and practical skills in economic literacy, particularly when learning to create value in an economy. To put it simply, economic literacy refers to the fundamental understanding of economic concepts and principles that enable individuals to make effective decisions in matters relating to their finances with a solid understanding and working knowledge of the economy.

It encompasses knowledge about various economic factors, such as supply and demand, inflation, GDP, taxes, and government policies. Hence, economic literacy in general is an understanding of the economic system, which deals with how people earn, spend, save, invest, and create value. In other words, the skill and understanding of creating value and managing wealth through the lens of the economy. For example, a person who spends more than he or she earns without any reliable means of payback shows a lack of economic literacy. Similarly, a person who invests in stable financial assets with good returns shows his or her understanding of the economy. Lastly, a person, entrepreneur, or investor who saves currency when the country is going through inflation or a big devaluation versus a person who saves an inflation-hedged asset like gold also depicts their understanding of the economy.

2.3. The Importance of Economic Literacy

When venturing into any business, student entrepreneurs must have economic literacy to navigate the complexities of the modern economy effectively. It empowers them to make sound financial decisions, participate actively in economic activities, and comprehend the implications of economic policies on their lives and society through critical thinking and sound decision-making. One of the striking aspects of economic literacy, according to Engelbrecht (2008), is that it enables and promotes the financial independence of individuals. Grimes and Lee (2000) also argue that economically literate people make better decisions in terms of personal finance, education, jobs, and politics, which provides a positive outcome for society. Further, former US Federal Reserve chairman Alan Greenspan (2002) asserts that the overall economy performs better when individual households flourish. The importance of economic literacy cannot be overemphasized, as it provides people with financial skills and knowledge of economic reality to make better financial and economic decisions.

2.4. Key Economic Concepts and Principles

Demand and supply are major economic principles that define what consumers and buyers want and how entrepreneurs or manufacturers get it to them through the supply chain, with price playing a major role. According to a layman's understanding of a free market scenario, the price of a product depends on the level of consumer demand. If, at a given price, the demand for a product exceeds the available supply, then prices increase, reducing demand. On the other hand, if supply exceeds demand, prices will fall, and demand will increase (Gale, 1955). Inflation is another economic concept that refers to an increase in the price of a product or service. Despite the lack of a universally recognized definition, inflation occurs due to various factors, typically understood as a rise in the money supply that influences the prices of goods and services as well as the value of assets. Inflation is the increase in an economy's average price level over time (Ewins, 2009). Inflation is defined as the general increase in prices and the fall in the purchasing value of money. Thus, knowledge of inflation enables individuals to assess changes in purchasing power and plan for future expenses accordingly, since inflation is the effect of the excessive supply of currency that causes it.

2.4.1. Gross Domestic Product (GDP)

GDP is the total productive capacity of a country over a particular period. It is typically measured quarterly or annually. It is an important economic indicator that shows the economic performance of a given economy. Like many other economic indicators, there is a lot of tension about their meaning and definition among economic thinkers. However, the value of all the goods and services produced for money in an economy, evaluated at their market prices, constitutes GDP. Excludes the value of unpaid work (such as caring for reproductive labor performed in the home). Each stage of production's value-added contributes to the calculation of GDP (Ewins, 2009). Understanding GDP offers insights into a country's overall economic performance and standard of living. Taxes and Government Policies: Tax is simply the amount an individual, business, or firm is liable to pay to the government where he or she resides or operates. On the other hand, government policy largely

influences the operation of a company regarding tax (Song, Zhang, & Zhang, 2022). For instance, businesses tend to avoid investing in economies with high tax rates, preferring those with more manageable tax rates. Awareness of taxation and government policies aids individuals and businesses in understanding their fiscal responsibilities and the broader economic environment.

2.4.2. Consumer Decision-Making

Without a better understanding of the economy, making good economic decisions will be difficult for individuals, households, and entrepreneurs. For example, if people do not understand the causes and effects of inflation, it will be difficult for them to manage their income and make better financial decisions. Similarly, when the economy is underperforming, entrepreneurs without economic literacy will find it difficult to make decisions that help them navigate through the crisis. Thus, consumer decision-making is largely influenced by their level of economic literacy, which informs their choices when purchasing goods and services (Koomson, Villano, & Hadley, 2021).

2.5. Economic Reports

Economic literacy allows individuals to interpret economic news and data reports accurately, informing them about economic trends and developments (Hamid & Loke, 2021). This is one of the most important aspects of economic literacy. Many people think that the economy is independent of human action, which is completely at odds with economic reality. For instance, when there is an increase in the price of commodities, it could be as a result of an increase in interest rates, a shortage of money supply, a scarcity of raw materials, or a disruption in the supply chain, all of which have direct and indirect effects on them. Having the ability to understand and interpret economic data is very crucial for entrepreneurs, individuals, and households. Much of the literature on financial and economic reports supports the notion that reading and understanding economic reports improves individuals' decision-making regarding personal financing. Further, Xu (2022) asserts that households that seldom read economic reports are not financially literate and, thus, cannot actively participate in the financial market, which leads to little or no benefit for them. This also includes managing debt for their entire lives (Lusardi & Wallace, 2013). Economically literate individuals can actively engage in economic activities (Krisna, Yusuf, & Putra, 2023) and further contribute to economic growth and development as well as a country's financial system (Hasan, Le, & Hoque, 2021). When people become aware of the benefits of being economically literate via understanding economic reports or news, it serves as an incentive for them to pursue their economic needs collectively or independently. Understanding economic reports or news provides individuals with the requisite knowledge and skills to evaluate economic policy documents. When people become economically literate, it gives them the skills to understand how economic policies affect them (Lusardi & Mitchell, 2014), as do entrepreneurs (O'Connor, 2013). Economic literacy enables individuals to assess the effectiveness and implications of economic policies on society and advocate for informed and favorable policy decisions. Sagar et al. (2023) highlight that policymakers must create an enabling environment supporting entrepreneurship, including access to finance, education, infrastructure, and supportive regulations. Formal education and specialized courses on economics provide individuals with foundational knowledge and skills (Burchi et al., 2021). Meanwhile, Harun et al. (2021) highlighted that the low level of financial literacy among the population contributed to the failure of many entrepreneurs.

2.6. Conceptualization of Entrepreneurship Potential

Generally, there is no accepted model or definition of who is an entrepreneur or what they do (Churchill & Lewis, 1986). However, this does not leave researchers unaware of their potential. Entrepreneurship potential is about a person's tendency or ability to become an entrepreneur (Terek et al., 2017). It could also mean the innate qualities, characteristics, and skills that individuals possess that influence them to engage in entrepreneurial activities. These potentials encompass a

combination of traits such as creativity, innovation, risk-taking ability, self-motivation, leadership, communication skills, problem-solving, and resilience.

2.7. Qualities of Individuals with High Entrepreneurial Potential

2.7.1. Creativity and Innovation

Creative thinking is one of the most highly rated entrepreneurial skills that fuels creativity. Creativity is recognized as the ability to create, bring something new into existence, or invent a new form through imaginative skill. On the other hand, innovation is what gives rise to creative thoughts. It is adding something new to an existing product system or process (Okpara, 2007). Scholars of creativity also relay a strong relationship between creativity and innovativeness (Cummings & O'Connell, 1978). Successful entrepreneurs often demonstrate a capacity for thinking outside the box, generating novel ideas, and developing innovative solutions to problems, which is at the heart of modern entrepreneurship.

2.7.2. Risk-Taking Ability

Taking risks is one of the major qualities of an entrepreneur. They assumed financial risk when they felt confident in themselves (Amit et al., 2022) and their venture. Ogbari (2023) asserts that students with entrepreneurial ability tend to venture into risk, as this skill significantly impacts their risk-taking appetite. Entrepreneurs with sound entrepreneurial knowledge, skills, and potential are willing to take calculated risks and embrace uncertainty to pursue opportunities for growth and success.

2.7.3. Self-Motivation and Passion

Self-motivation and passion are powerful forces behind an entrepreneur's venture. However, there is no consensus among scholars about its origin. Schumpeter (1961) argued that the major motivator for many entrepreneurs' empire-building is embedded in the pursuit of gaining financial reward. However, some entrepreneurs are also motivated by the reward of becoming financially independent, among other benefits such as pursuing one's dreams, earning lots of money, and being their boss (Mani, 2013). Entrepreneurship requires self-initiative, drive, and a strong sense of purpose to overcome challenges and persevere in the face of obstacles. This motivation, blended with passion, is what builds resilience and grit among entrepreneurs to never give up on their dreams.

2.7.4. Leadership and Communication Skills

According to Alvarez and Barney (2002), entrepreneurial leadership at the individual level is a form of leadership that is focused on the initiative to start a business; at the organizational level, it means actions to monitor innovation and actions to take advantage of perceived opportunities at the market level. On the other hand, Watchravesringkan et al. (2013) found that communication skills play a vital role in entrepreneurship. At the same time, leadership and communication are vital skills for an entrepreneur. They are tools for entrepreneurs to lead and share their vision with teams and stakeholders, especially in today's digital age.

2.7.5. Problem-Solving and Resilience

Entrepreneurs must navigate through obstacles, adapt to changing circumstances, and demonstrate resilience in the face of setbacks. Problem-solving skills are one of the major approaches used by entrepreneurs during this period. In the field of engineering, for example, it is usually defined as an analytical or procedural approach to solving problems that involve (i) identifying and defining the problem, (ii) setting performance metrics, (iii) establishing constraints, (iv) generating alternatives, and (v) evaluating these alternatives (Camacho, 2016). Although there are different perspectives when discerning entrepreneurial resilience, several tools are usually evident among

entrepreneurs. Flynn et al. (2004) and Pramesti and Prihastiwi (2020) opine that tools that strengthen resilience are easy “temperament, flexible personality, optimistic, positive perspective towards self, self-efficacy, sense of meaning, self-regulation towards awakening and impulse, and sense of humor. The external factors are: a) family system (child nurture, interpersonal relationships, expectations, norms, habits, and cohesive relationships); b) peer system (friendship, peer group, value, norm); and c) cultural and societal system (religion, tradition, ritual, values, and law)”.

2.8. The Relationship Between Economic Literacy and Entrepreneurship

According to Andarsari and Ningtyas (2019), economic literacy provides individuals with a deep understanding of market dynamics, including supply and demand forces, consumer behavior, and competitive landscapes. This understanding enables entrepreneurs to identify market opportunities, anticipate consumer needs, and develop innovative solutions to address them. Moreover, economically literate entrepreneurs can assess market trends, competition, and regulatory environments more effectively, enhancing their ability to innovate and differentiate their offerings in the marketplace. Transitioning from macroeconomic considerations to microeconomic dynamics, Suganda (2022) addresses the impact of network capability and marketing intelligence on product innovation among SMEs in West Bandung. Through path analysis, the study illustrates how these factors, mediated by the marketing mix, significantly contribute to product innovation. This research accentuates the importance of strategic market orientation and networking in fostering innovation within the SME sector, thereby enhancing their competitiveness and sustainability. Paramita and Sulistyo (2022) focus on the potential of SMEs with disabilities to achieve competitive advantage through marketing prowess and innovation, suggesting a pathway for inclusivity and business success in the face of adversity.

2.8.1. Risk Perception and Management

Economic literacy provides individuals with the requisite knowledge and competencies to evaluate and effectively manage risks inherent in entrepreneurial pursuits (Gołuchowski, 2023). Entrepreneurs who understand economic principles such as risk-return trade-offs, opportunity costs, and market volatility can make informed decisions regarding risk-taking and risk-mitigation strategies. Furthermore, economically literate entrepreneurs are better equipped to anticipate and navigate economic uncertainties, thereby increasing their resilience and ability to withstand market fluctuations. Gan, Tan, and Swi (2022) delve into the connection between knowledge, risk perception, and protective behavior in the context of the COVID-19 pandemic in Malaysia. Despite hypothesizing that knowledge would influence protective behavior through risk perception, risk perception directly influences protective behavior, suggesting that awareness or information about risks is not sufficient to drive behavioral changes unless it significantly alters risk perception. Santoro et al. (2023) emphasize the significance of understanding citizens' risk perceptions for effective flood risk management. Underscores the complexity of managing urban areas exposed to flood risks. The study identifies diverse citizen categories with varying risk exposures, advocating for targeted measures to mitigate risks effectively.

2.8.2. Access to Capital and Investment Decisions

Economic literacy enhances entrepreneurs' understanding of disparate economic and financial segments of business, which include but are not limited to acquiring capital, investment opportunities, and financial management. As a business owner or entrepreneur, an understanding of economic and financial concepts such as financial markets, capital structures, and investment strategies plays an important role in making informed decisions regarding fundraising, investment allocation, and resource allocation. In their study, Liu, Schiff, and Swem (2024) investigate the role of access to capital on investment decisions within the energy sector. The study shows that small business owners prefer to put their capital in new and riskier ventures compared to government-

established businesses. This further justifies the need for comprehensive knowledge of financial concepts before taking a risk in business. Tripathi (2017) conducted a study on the implications of the Indian government's adoption of the International Financial Reporting Standards (IFRS). This comprehensive review elucidates how IFRS adoption influences financial reporting quality, transparency, and investment decisions, providing valuable insights for policymakers and regulators. The findings suggest a nuanced understanding of the benefits and challenges of IFRS adoption, highlighting its pivotal role in enhancing financial transparency and decision-making processes.

2.8.3. Education and Training Impact

In the organizational context, Ali, Omar, and Rashid (2021) assess the outcomes of employee training programs in Malaysian service-based organizations. Their qualitative study stresses the importance of comprehensive training design and effective coaching to bridge the gap between current employee capabilities and organizational expectations. This research adds to the discourse on human resource practices, advocating for targeted training programs to enhance organizational efficiency. Aziz, Mohd, Selamat, and Omar (2021) address the efficacy of online training programs during the COVID-19 pandemic. Their quasi-experimental study among Malaysian undergraduates reveals the effectiveness of online training, regardless of the diversity in training objectives.

2.9. Conceptual Framework

There are several theories and assumptions among scholars and thinkers in entrepreneurship, economics, and education. However, in the context of this study, special attention is given to the innovation proposition propounded by Schumpeter and human capital theory, which is associated with Gary Becker. Innovation theory is a multidisciplinary concept that explores the processes, factors, and outcomes of introducing new ideas, products, services, or practices into society or markets. A famous advocate of innovation theory is Joseph Schumpeter, author of "The Theory of Economic Development," published in 1911. Schumpeter argued that innovation is a key driver of economic growth and development, suggesting that entrepreneurial activities, characterized by the introduction of new products, technologies, or business models, disrupt existing markets and create new ones. He underscored the significance of entrepreneurs as catalysts of transformation, driving innovation through processes like creative destruction that usher in the new. Innovation theory has been applied to understanding the dynamics of industrial revolutions, markets' evolution, new industries' emergence, and technological advancements' impact on society. Beck 1964 proposed human development as the catalyst for capacity building through education. As such, education midwives the transmission and understanding of basic economic indices, which serves as a putative factor in the success of entrepreneurs. Therefore, the entrepreneurial spirit needs to blend with adequate knowledge of economic parameters for a reliable, profitable, and sustainable business. The combination of innovation and human capital theories will serve as an underpinning model for this study. The integrated economic education and entrepreneurship theory model revolves around a multifaceted approach that blends theoretical learning with hands-on experiential activities, as highlighted above from the work of Schumpeter and Becker. At its core, the model emphasizes a solid foundation in economic principles, including market dynamics, resource allocation, and risk assessment, embedded with an understanding of innovation theory. Through interactive lectures, case studies, and simulations, students comprehensively understand how economic forces shape business environments and opportunities. The cultivation of entrepreneurial skills and mindsets is contingent on foundational knowledge of financial and economic indicators. It is important to highlight some related findings from applying innovation theory to gain proper insights. Si et al. (2023) and Lounsbury et al. (2021) assert that innovation involves technological advancements and social, organizational, and institutional changes. That is, the creative attribute of entrepreneurs can only be successful if knowledge of economic management skills to make optimum decisions for social and

institutional reform is adequate. Successful and sustainable innovation requires a conducive environment that fosters entrepreneurship, encourages risk-taking, and supports the diffusion of new ideas (White, 2022; Juliana, 2021). Additionally, innovation is a complex and iterative process influenced by various factors such as government policies, market dynamics, cultural norms, and individual motivations (Zhang, Sangsawang, & Vipahasna, 2023; Cortes & Herrmann, 2021).

In addition, studies have shown the relevance of human capital theory to entrepreneurship development among students. Gary S. Becker, an esteemed scholar renowned for his extensive contributions to the discourse surrounding human capital, exhibited a profound penchant for applying economic analysis to human conduct (Becker, 1976). Becker posited that education should be regarded as a component of "human capital," analogous to other investments in physical capital. Becker's paradigm underscores the rationale behind investing in education to provide relevant knowledge of socio-economic factors to the workforce, proficiency in production, and intrinsic motivation as integral components of an individual's human capital. Barro (2013) delved into the significance of human capital as a pivotal element in enduring expansion within his discourse on economic advancement, emphasizing the empirical ramifications and the nexus of theory to substantiate his claim. His conceptualization of economic advancement reinvigorated the framework of economics and expansion by unveiling an array of novel primary catalysts for economic proliferation across an extended period from the mid-19th century to the contemporary era. Another empirical study by Gruzina, Firsova, and Strielkowski (2021) argues that positive economic growth is made possible by the growth of human capital, which, in turn, promotes a country's capacity for innovation. Furthermore, contemporary discourse attributes the variance in national economic expansion to the contrasting landscapes of developed and developing nations, each characterized by disparate degrees of human capital cultivation. This disparity in growth trajectories between developed and developing economies stems from the former's embrace of heightened productivity metrics, juxtaposed with the latter's attainment of elevated productivity benchmarks owing to its sizable demographic comprising emerging nations. Within this model, entrepreneurship education becomes strategically important, taking into consideration the development of a curriculum with practical elements aimed at nurturing the entrepreneurial spirit in students. Experiential learning activities such as business plan competitions, start-up simulations, and mentorship programs provide students with opportunities to apply economic principles in real-world scenarios, fostering creativity, resilience, and adaptability. Moreover, the model emphasizes the importance of fostering an entrepreneurial mindset characterized by problem-solving, opportunity recognition, creative thinking, innovation, and effective communication as the core of learning. By integrating economic education with entrepreneurship theory in this manner, the model equips young students with both the theoretical knowledge and practical skills necessary to embark on entrepreneurial endeavors with confidence and success. From this preceding discussion, it can be *hypothesized that economic factors such as financial and educational factors significantly correlate with entrepreneurship potential among school pupils.*

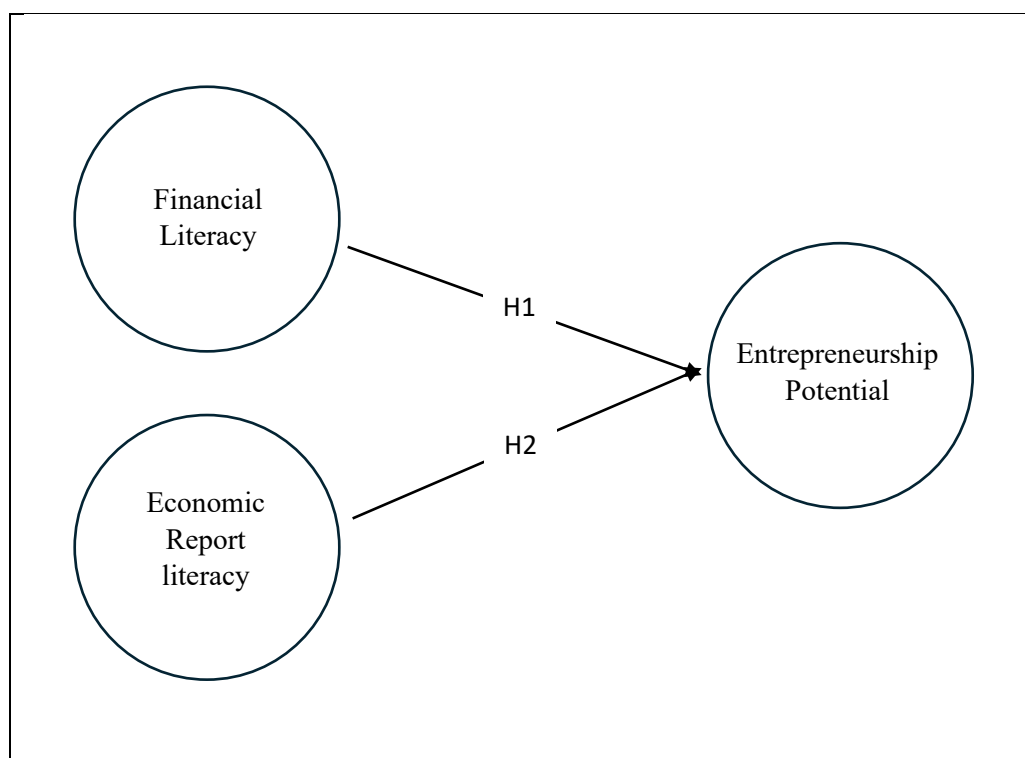


Figure 1. Economic Literacy and Entrepreneurship Potential (ELEP) Model

Figure 1 above shows the relationship between the economic literacy component and entrepreneurial potential. Financial literacy, as discussed earlier, indicates micro and macroeconomic indices that are to be understood by a would-be entrepreneur. This includes earning, managing, investing, and donating. It is all about money and how to invest, save and manage money. Financial literacy specifically focuses on understanding debt and money literacy components. Financial literacy is prominent in bolstering entrepreneurial capacity (Liu, Schiff, and Swem, 2024). Knowledge and understanding of economic reports are other important factors in promoting entrepreneurship (Xu, 2022). The economic report includes interpreting economic news and data reports accurately. From the model above, two hypotheses can be formulated.

H1: Financial literacy influences entrepreneurial potential among Form 4 secondary school students

H2: Economic report literacy influences entrepreneurial potential among Form 4 Secondary school students

3. Method

3.1. Population and Sample

A quantitative research approach was adopted in this study. A cross-sectional correlational design was implemented as the mainframe of this study. The population of this research is the Form 4 secondary school students in the Sik district, Kedah. Information on the total number of students was obtained from the local school authority of each secondary school in Sik. A permission letter was obtained from Jabatan Pendidikan Negeri Kedah (JPN) and Alor Setar (the local education authority in Kedah). A self-developed Economic Literacy and Entrepreneurship Potential Questionnaire (ELEPQ) was distributed to all students in all nine (9) secondary schools in the Sik district, Kedah. The population of students in the nine (9) schools is 450 students. The entire 450 students were included in the study. However, one school declined to participate in the research. This brings the number of students who participated in the study to 374. A census sampling technique was used for this study, which focused on all upper secondary school pupils in the Sik district of Kedah (using Forms 4). Given

the manageable population size and the significance of these students to the study's focus, this approach was chosen to ensure comprehensive representation of the target population within the designated geographic area. The rationale for the selection of Sik, Kedah, as the research site is due to the fact that Sik is mostly a rural district with limited access to formal economic and entrepreneurship education. Examining how elements of economic literacy affect the entrepreneurial potential of kids who might not often have the chance for such growth provides an opportunity to understand the importance of conducting this study in Sik. Including this region in the study not only draws attention to a group that is frequently ignored in the body of literature already in existence but also provides insightful information on regional educational needs and policy issues.

3.2. Data Collection

With the school principals' and teachers' support, the questionnaire was distributed to all the students. The questionnaire was distributed to all Form 4 students in 8 secondary schools within 4 weeks, October-November 2023. The composition of Form 4 classes in all 9 secondary schools in Sik was instructive. Most schools have 3 classes for Form 4 students: 1 science class and two Art and Business classes. Some of the schools do not have science classes at all. This is reflected in the demographic information of the students (see Table 1).

3.3. Research Instrument

Before the distribution of the questionnaire, a content validity exercise and pilot study were conducted to establish the validity and reliability of the questionnaire. Content validity was established by giving the questionnaire to the 5 academic staff from Albukhary International University (AIU). Two of the staff were professors from the School of Education and Human Sciences, while the other 3 were lecturers from the School of Business and Social Sciences. The questionnaire was translated into Bahasa Melayu and back-translated to English to ensure consistency with the meaning of each item. The questionnaire was revised based on the feedback from the experts. As for the pilot, one of the schools (SMK Sik Jeneri) was chosen for the pilot study. A total of 39 students participated in the pilot exercise. The instrument's internal consistency based on the pilot data was established using the Cronbach's alpha threshold. The Cronbach alpha for Economic literacy is 0.954, and for Entrepreneurship potential accounted for 0.910. After both the pilot and validation exercises, some items in the questionnaire were revised, while some were discarded based on feedback. The initial total number of items in the questionnaire was 63. However, one item was removed based on students' feedback during the pilot. The total number of items in the questionnaire after pilot was 62. A construct validity exercise was conducted using exploratory factor analysis (EFA). Specifically, principal component analysis (PCA, with varimax rotation) is used to extract the factor components and validate each item's contribution to its respective construct. The total number of items was reduced to 60 after the PCA analysis. Item No. 9 was removed from the economic literacy items due to low factor loading. The initial components extracted for economic literacy were six (6). This was later re-categorised or collapsed into two (2) main components of Financial Literacy and Economic Report. Meanwhile, the entrepreneurship potential scale showed to be a unidimensional scale with only one component extracted. The scales were later subjected to PLS-SEM factor analysis (measurement model) to further check the contribution of each item to its respective construct. The total number of items reduced drastically to 17, as shown in Figure 2.

Table 1. Demographic Variables of the Respondents

Variable	Number of Resp.	Proportion
Gender		
Male	152	40.6%
Female	222	59.4%
Subject		
Science	109	29.1%
Art and Business	265	70.9%
Family Status		
Living with both parents	323	86.4%
Living with father	7	1.9%
Living with mother	29	7.8%
Living with a relative	5	1.3%
Other	10	2.7%
Family income		
RM999 and below	132	35.3%
RM1000-RM1999	122	32.6%
RM2000-RM4999	63	16.8%
RM5000 and above	45	11.8%

Table 1 shows the distribution of respondents according to demographic variables such as gender, subject, family status, and income. The majority of students (59.4%) were female. More than 70% of the students are in the Art and Business stream/track. The majority of the students lived with both parents, while most of them came from families with monthly incomes of below RM1000 (\$200). Income distribution parity plays a significant role in student scores on both the EL and EP scales, as we shall see later in the data analysis and discussion section.

3.4. Data Analysis

A total of 62 items were included in the initial survey after the pilot test. Economic literacy consists of 34 items, and the entrepreneurship potential scale consists of 28 items. The item responses were on a Likert scale ranging from 1 (=strongly disagree) to 5 (=strongly agree). The items were reduced to 60 after the PCA exercise. Computation of the measurement model to solidify the validity of the scales led to a drastic reduction of items to 17, which was eventually used in conducting the final data analysis. The respondents' answers were analyzed using SmartPLS 4.3, conducting structural equation modeling with partial least squares parameter estimation (PLS-SEM). PLS-SEM is more powerful than other types of SEM and can be conducted on a small sample size or a non-normal sample (Hair et al., 2012). PLS-SEM is also preferred over CB-SEM to analyze an exploratory and complex model.

4. Result

4.1. Descriptive Statistics and Correlations

In this subsection, the average responses on each variable and the correlations between the three variables were displayed. Table 2 shows the mean and standard deviation of participants' responses and correlations of the variables.

Table 2. Descriptive Statistics and Correlations Between Variables

	M	SD	Correlations		
			1	2	3
1. Financial Literacy	3.12	0.75	—		
2. Economic Report	3.01	0.81	0.630*****	—	
3. Entrepreneurship Potential	3.37	0.73	0.596**	0.659*****	—

Note. * $p < .05$, ** $p < .01$, *** $p < .001$

The correlations in Table 2 show that both economic literacy components, financial literacy and reading of economic reports, are related to entrepreneurship potential. Financial literacy has a statistically significant positive correlation with entrepreneurship potential ($r=0.596$, $p<.001$), economic reports have a positive and significant correlation with entrepreneurship potential ($r=0.659$, $p<.001$), and financial literacy and economic reports are positively and significantly correlated ($r=0.630$, $p<.001$). However, Pearson correlation measures the relationship between two variables, while SEM, based on multiple regression, analyzes how variables collectively contribute to predicting an outcome variable (Cohen et al., 2014). Therefore, the structural equation model is adopted by analyzing how the factors predict the outcome variable.

4.2. Structural Equation Model

4.2.1. Measurement Model

Measurement models of PLS-SEM evaluate the reliability and validity of items and constructs (Sarstedt et al., 2022). The current study used a self-developed questionnaire, making it necessary to evaluate the reliability and validity of the items and constructs. Figure 2 shows the outer loadings of each indicator after excluding items that have loadings less than 0.4 (Hair et al., 2021). Factor loadings represent the bivariate correlations between a construct and its respective indicators, indicating how much each item contributes to the assigned construct (Hubona, 2021). The rule of thumb for the required factor loadings to be included in the model is 0.50, which means the item reflects at least 50% of the construct variance (Hair et al., 2021). However, loadings that should be excluded from the model are the ones that are less than 0.4. All items with factor loading less than 0.5 were removed from the data. This reduced the number of items included in the further analysis to seventeen (17). Partial Least Squares (PLS) was used to analyze the research model using the SmartPLS 4.3 software. Following the recommended two-stage analytical procedures by Anderson and Gerbing (1988), the measurement model was tested to ascertain the validity and reliability of the measures, followed by an examination of the structural model (testing the hypothesized relationship) (Hair et al., 2021). Besides, to test the significance of the path coefficients and the loadings, a bootstrapping method (5000 resamples) was used (Hair et al., 2021).

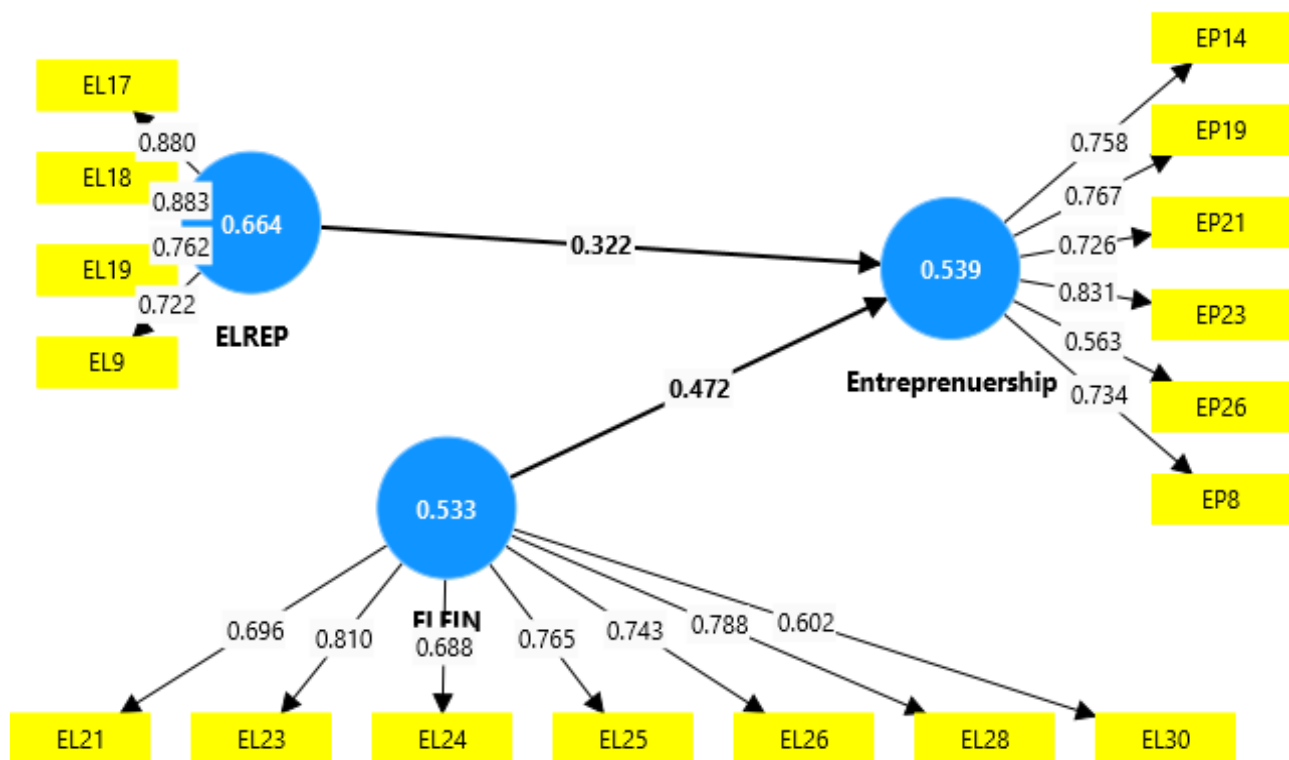


Figure 2. ELEP Measurement Model: Final Measurement Model After Excluding Indicators Showing Inadequate Loadings

4.2.2. Measurement Model Analysis

Figure 2 shows the measurement model's outcome of the study's three latent variables. Financial literacy, reading economic reports, and entrepreneurship potential. It is important to state some thresholds and fit indices for the ELEP model. Dijkstra and Henseler's Rho (Rho A) was used as a reliability metric, which is a trade-off between Cronbach's Alpha and RhoC (Hair et al., 2021). The metric has more general properties since it derives from the assumption of unequal factor loadings. The convergent validity of the data was examined to assess the measurement. The convergent validity of the measurement model was ascertained by examining the loadings, average variance extracted (AVE), and composite reliability (Gholami et al., 2013; Rahman et al., 2015). The loadings were all higher than 0.5, the composite reliabilities were higher than 0.7, and the AVE of all constructs was higher than 0.5, as suggested in the literature (see Table 3 and Figure 2). Rho_A is used to evaluate the reliability of the estimated model, specifically considering the correlations between indicators, whereas composite reliability refers to the internal consistency of the construct.

Table 3. Reliability and Validity of the Scale Used

Construct	Item	Loading	Cronbach Alpha	Composite	(<i>Rho_a</i>)	AVE
Financial Literacy	EL21	0.696	0.851	0.858	0.533	0.533
	EL23	0.810				
	EL24	0.688				
	EL25	0.765				
	EL26	0.743				
	EL28	0.788				

	EL30	0.602				
	Item	Loading	0.826	0.839	0.664	0.664
	EL9	0.722				
Economic Report	EL17	0.880				
	EL18	0.883				
	EL19	0.762				
	Item	Loading	0.826	0.847	0.539	0.539
	EP8	0.734				
	EP14	0.758				
Entrepreneurship Potential	EP19	0.767				
	EP21	0.726				
	EP23	0.831				
	EP26	0.563				

4.2.3. Structural Model Analysis

4.2.4. Testing Model Fit

This study applied multivariate data analysis techniques. Specifically, the study employed the Partial Least Squares Structural Equation Modelling (PLS-SEM). According to Hair et al. (2011), PLS-SEM is designed to analyze path coefficients between variables in the model. This analytical tool (PLS-SEM) adopts a bootstrapping approach to populate and compute adequate samples that are used to fit the data and to generate inferential statistics, specifically t-statistics and p-values for path coefficients in the model (Sarstedt et al., 2022). By convention, most authors use the recommended 5,000 replications for bootstrapping in PLS-SEM (Streukens & Leroi-Werelds, 2016). Table 4 shows the bootstrapping results of 5,000 replications on the model. Prior to testing the model, the model fit indices were tested using three model fitting parameters. The Standardised Root Mean Square Residual (SRMR), Normed Fit Index (NFI), and the exact model fit (bootstrapped-based statistical inference). The SRMR is defined as the difference between the observed correlation and the model-implied correlation matrix, whereby values less than 0.08 (Hu & Bentler, 1998) are considered a good fit. Henseler et al. (2016) introduced the SRMR as a goodness-of-fit measure for PLS-SEM that can be used to avoid model misspecification. The normed fit index (NFI) is an incremental fit measure that computes the Chi-square value of the proposed model and compares it against a meaningful benchmark (Bentler & Bonett, 1980). NFI values above 0.9 usually represent an acceptable fit. The third fit value is the exact model fit, which tests the statistical (bootstrap-based) inference of the discrepancy between the empirical covariance matrix and the covariance matrix implied by the composite factor model. Dijkstra and Henseler (2015a; 2015b) suggested the d_{LS} (i.e., the squared Euclidean distance) and d_G (i.e., the geodesic distance) as the two different ways to compute this discrepancy. A model fits well if the difference between the correlation matrix implied by the model being tested and the empirical correlation matrix is so small that it can be purely attributed to sampling error; thus, the difference between the correlation matrix implied by the model and the empirical correlation matrix should be non-significant ($p > 0.05$). Henseler et al. (2016) found that d_{ULS} and $d_G <$ than the 95% bootstrapped quantile (HI 95% of d_{ULS} and HI 95% of d_G).

Table 4. Model Fit

S/N	Fit Indices	Abbreviation	Obtained Value	Cut-off Value	References
1	Standardized Root Mean Square Residual	SRMR	0.063	<0.08 Good fit	Hu & Bentler, 1998 Henseler et al. (2014)
2	Normed Fit Index	NFI	0.962	>0.9	Bentler & Bonett, 1980
3	Exact model fit	d_{LS} & d_G	95%	$p > 0.05$	Henseler et al. (2016)

4.3. Hypothesis Testing Results

Hair et al. (2017) suggested that assessing the structural equation model requires looking at the R^2 , beta (β), and the corresponding t-values via a bootstrapping procedure with a resample of 5,000. Further to these basic measures, researchers should also report the predictive relevance and effect sizes (f^2). Sullivan and Feinn (2012) argued that while a p-value provides information about significant or nonsignificant relationships, impact, or cause-effect, it fails to reveal the size of the effect. As such, it is important to provide information on both the substantive significance (effect size) and statistical significance (p-value) in data interpretation and reporting. The fit indices stated in Table 4 were all fulfilled by the structural model of this study. SRMR shows a value of 0.063, which is an acceptable fit as stated by Henseler et al. (2016). The normed Fit index accounted for 0.962, demonstrating an acceptable fit as Bentler & Bonett (1980) suggested. As discussed earlier, reporting in this study includes beta values, effect sizes, and confidence intervals (see Table 5).

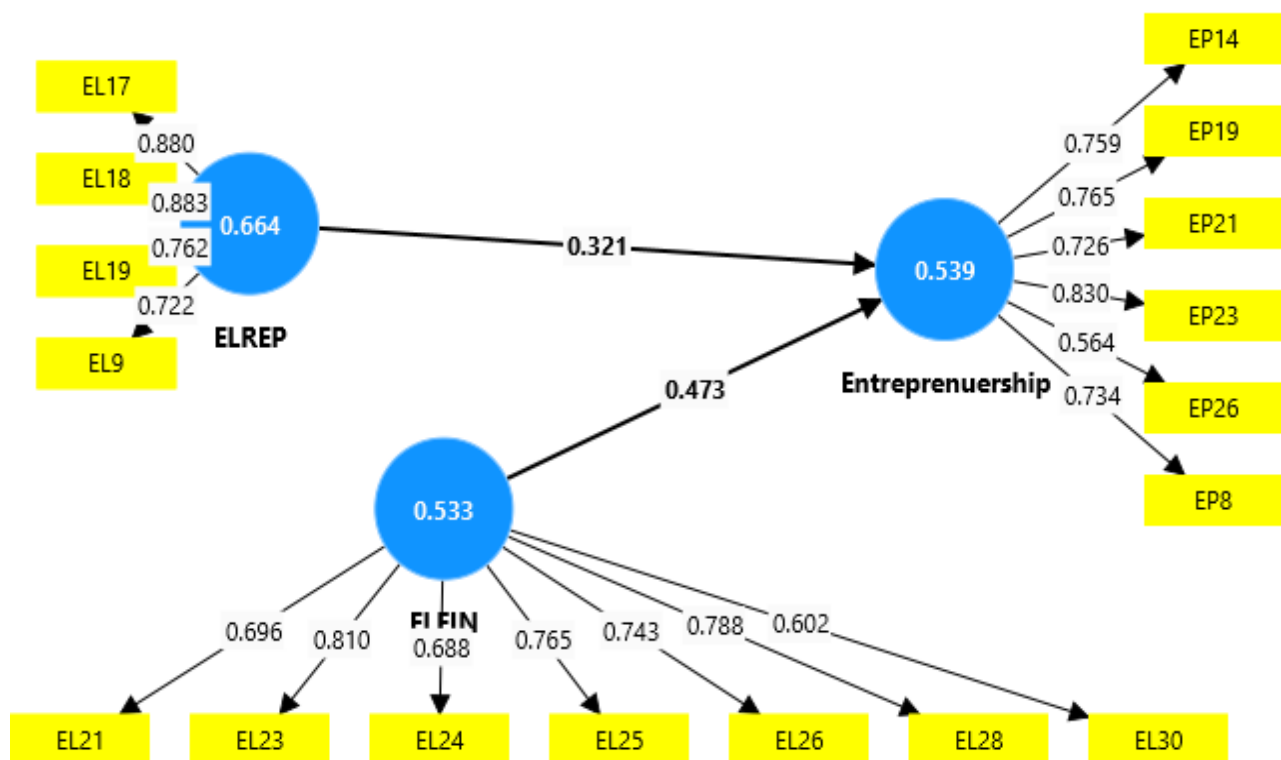


Figure 3. PLS-SEM ELP Model Path Coefficient

The Figure 3 model shows a positive relationship between the dependent latent variable (Entrepreneurship potential) and the latent independent variables (Economic literacy components). However, these outcomes still need to be further interrogated by testing for the significance of the paths. This will be done using bootstrapping at a confidence interval of $p < 0.05$. Figure 4 shows the result of the bootstrapping conducted to verify the significance of the path coefficients shown in Figure 3.

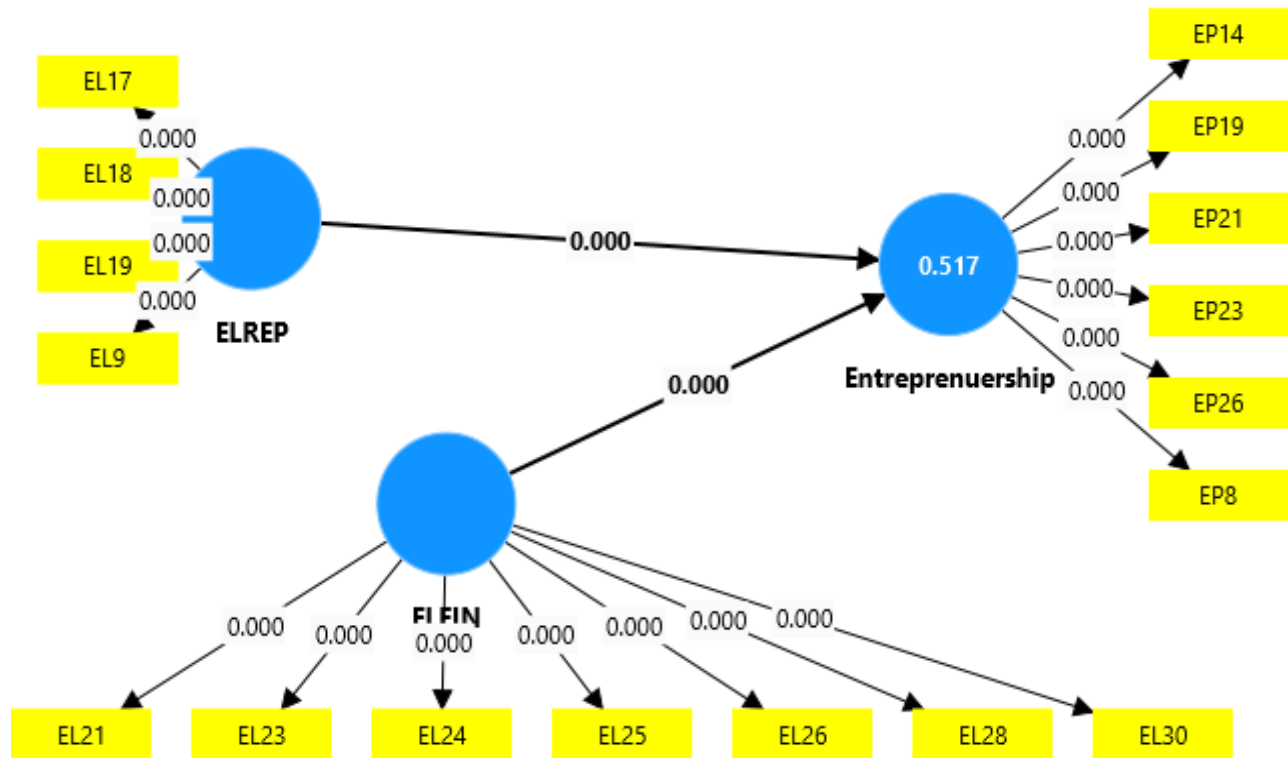


Figure 4. Test for Path Coefficient Significance Using Bootstrapping ($p < 0.05$)

Based on the bootstrapping output, financial literacy ($\beta = 0.473$, $t = 7.271$, $p < 0.05$, $f^2 = 0.269$) and reading economic report ($\beta = 0.321$, $t = 5.102$, $p < 0.05$, $f^2 = 0.130$) positively influenced entrepreneurship potential explaining 50.17% of the variance in entrepreneurship potential. This gives support to H1 and H2. This suggests that economic literacy components—financial and economic reports have a significant effect on student entrepreneurship potential. These results demonstrate that student entrepreneurship potential and economic literacy identified in this study are in line with Schumpeter and Becker's economic and entrepreneurship assumptions. The results also show a medium effect size of financial literacy on entrepreneurship potential and a small effect size of reading economic reports on entrepreneurship potential. This indicates both the statistical significance and practical importance of the duo economic literacy components (financial literacy and reading economic reports) on entrepreneurship potential.

The findings are consistent with the underlying theoretical framework and the proposed hypotheses. Cohen's (1988) classification criteria were used to assess all effect sizes; small, medium, and large effects are indicated by f^2 values of roughly 0.02, 0.15, and 0.35, respectively. The results highlight the robustness of the suggested structural links and show that the model explains 50.17% of the variance in entrepreneurial potential, demonstrating a strong level of explanatory strength. This level of explained variance demonstrates the model's usefulness in determining critical elements associated with entrepreneurial potential.

Table 5. Results of the Hypothesis Testing

Hypothesis	Relationship	Std. Beta	t-value	Decision	R ²	f ²
H1	*ELFIN → Entrepreneurship	0.473	7.271	Supported	0.517	0.269
H2	*ELREP → Entrepreneurship	0.321	5.102	Supported	0.517	0.130

*ELFIN: Economic Literacy Finance, ELREP: Economic Literacy Report

5. Discussion

5.1. Relationship between Financial Literacy, Economic Report and Entrepreneurship Potential

The findings show that economic literacy components, such as financial literacy, predict entrepreneurship potential. This finding is in consonance with earlier studies like Andarsari and Ningtyas (2019), Ahmad, Idrus, & Rijal (2023), Lanivich et al. (2021), and Zait & Berteau (2015). This confirms the prediction that financial literacy is important in promoting entrepreneurship potential. This shows that an individual who has knowledge and understanding of basic economic indices will have high entrepreneurship potential. Furthermore, the findings also show that reading economic reports also predicts entrepreneurship potential which is like the research of researchers like Hamid & Loke, (2021) news and data reports accurately, enable entrepreneurs to stay informed about economic trends and developments, Xu (2022) households who seldom read economic reports are not financial literacy, and thus, cannot actively participate in the financial market.

The research model was developed on economic literacy and entrepreneurship potential. The data was collected from Form 4 students in Sik, Kedah. The study was built on financial literacy and reading economic reports as predictors of entrepreneurship potential among young entrepreneurs. The data strongly validated the suggested conceptual framework as a comprehensive model for students' entrepreneurship potential to actively participate in innovative and creative entrepreneurial endeavors, which has important implications for students' attitudes, self-efficacy, and decision-making in business. The model also indicates that inadequate knowledge and understanding of basic economic factors may hinder youths from participating in business and entrepreneurial activities. The results show that higher financial literacy and understanding of economic report communication may increase students' entrepreneurial potential.

The findings indicate that economic literacy is a direct enabler of entrepreneurship potential among young adults. Lack of basic economic knowledge may hinder students from participating in entrepreneurship activities. Another factor that could deter students from actively participating in entrepreneurial endeavors is the unwillingness to read or listen to economic news and financial reports. (Hasan, Le, & Hoque, 2021). Based on the path coefficient of the models, financial literacy has the highest total effect on entrepreneurship potential. In other words, if the students understand basic economic indices, they will likely participate in business and entrepreneurship activities. Research in the entrepreneur field was in line with the current research results that financial literacy and reading economic reports have crucial implications for entrepreneurship potential (Song, Zhang, & Zhang, 2022).

6. Research Implications

The evidence of the significant effect of economic literacy on entrepreneurship potential has practical implications. To increase student active participation in entrepreneurship activities and economic literacy, the government should focus on enhancing financial and economic literacy among

students. Some things can be done to improve economic literacy among secondary school students, such as in-class interventions via education (Burchi et al., 2021) and out-of-class intervention training programs (Ali, Omar, and Rashid, 2021). The findings that financial literacy has the highest effect on student participation in entrepreneurial activities also have practical implications. Financial literacy learning can be conducted by setting instructions that may improve understanding of basic micro and macroeconomics activities. The findings also extend the literature by providing an economic literacy and entrepreneurship potential (ELEP) model to arouse the students' willingness to participate in enterprising endeavors.

7. Conclusion

This research was conducted to understand the economic factors that influence students' willingness and likelihood to actively participate and engage in entrepreneurship activities. Financial literacy and economic reports have been investigated through research (Liu, Schiff, and Swem, 2024; Del Vecchio et al., 2021; Ranta et al., 2022; Koomson, Villano, & Hadley, 2021). The current research also focuses on the effect of reading economic reports on students' participation in business and entrepreneurship activities. The current research finds that student active participation in entrepreneurship activities has been significantly and positively influenced by the combined effect of financial literacy and economic reports. Higher financial literacy and reading of economic reports will increase the student's potential to become an entrepreneur. Among the predictors, financial literacy or macroeconomic literacy shows the strongest effect on students' entrepreneurship potential. Further research can extend the entrepreneurship potential by exploring other socio-economic variables that may affect students' willingness to actively participate in entrepreneurship activities, business adventures, creativity, and innovative endeavors. Moreover, other research can focus on developing instructional interventions and training programs that may enhance students' confidence, curiosity, doggedness, and resilience to engage in business and become job creators in society. This research, therefore, has direct practical implications for young adults like the students in the Sik district, Kedah, who have strong inclinations to become strong entrepreneurs.

Declarations

Conflicts of Interest. No potential conflict of interest in this research paper.

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About the Contributor(s)

Bakare Kazeem Kayode, School of Education and Human Sciences, Albukhary International University (AiU), Jalan Tun Abdul Razak, 05200, Alor Setar, Kedah Darul Aman, Malaysia.

Email: bakare.kayode@aiu.edu.my

ORCID: <https://orcid.org/0000-0003-0883-1362>

Kalthom Husain, School of Education and Human Sciences, Albukhary International University (AiU), Jalan Tun Abdul Razak, 05200, Alor Setar, Kedah Darul Aman, Malaysia.

Email: kalthom.husain@aiu.edu.my

ORCID: <https://orcid.org/0000-0001-8374-2832>

Osaid N A Abdaljawwad, School of Business and Social Science, Albukhary International University (AIU), Jalan Tun Abdul Razak, 05200, Alor Setar, Kedah Darul Aman, Malaysia.

Email: osaid.abdaljawwad@aiu.edu.my

ORCID: <https://orcid.org/0000-0002-8272-2749>

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