

# ОБЩИЕ ВОПРОСЫ ОБРАЗОВАНИЯ

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## ECONOMIC, DIGITAL, OR ENTREPRENEURIAL LITERACY: WHICH MATTERS FOR DRIVING STUDENTS' ECONOMIC BEHAVIOUR?

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**Abstract.** *Introduction.* It remains a challenge for educational sides to confront the advancement of technology that has both challenges and opportunities in various sectors of human life. Since the matter of this theme, the studies on the impact of digital literacy and economic behaviour are insufficient. The lack of a broader understanding of the involvement of digital literacy in the economic and management literature with economic behaviour of students has motivated to perform a systematic literature review to identify and synthesise essential gaps in the literature. Despite there being several reviews in economic behaviour, it is not connected specifically to entrepreneurial literacy, and digital literacy. Most studies are taking a stance on investigating consumption behaviour or financial behaviour, as well as involving financial literacy as the major.

*Aim.* This study *aims* to identify the interconnectedness between economic, entrepreneurial, and digital literacy and economic behaviour of students.

*Methodology and research methods.* This study employed a systematic literature review of papers published in Scopus, Web of Science, EBSCOhost, and ProQuest databases using Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA). The use of PRISMA is beneficial in providing more detail results and diminishing any possibility biases.

*Results and scientific novelty.* The results of the study indicate that economic, digital, and entrepreneurial literacy can have impact to economic behaviour of students. The findings show an increasing economic behaviour trend in recent years in Indonesia and some countries. Thus, the study also noted that economic and digital literacy had been confirmed as essential to predict economic behaviour in terms of consumptive and productive activities. Meanwhile, the role of entrepreneurial literacy is paid less attention among scholars in explaining economic behaviour of students. This result will offer to future scholar in this theme to investigate these variables using certain method and approach.

*Practical significance.* The results of this study provide a practical suggestion for scholars in the field of economics and entrepreneurship to consider the variables listed in this study. In addition, the study review synthesises several gaps research in the education, economics, and management literature that present a basis for providing future research related to economic behaviour.

**Keywords:** economic behaviour, digital literacy, economic literacy, entrepreneurial literacy.

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## ЭКОНОМИЧЕСКАЯ, ЦИФРОВАЯ ИЛИ ПРЕДПРИНИМАТЕЛЬСКАЯ ГРАМОТНОСТЬ: ЧТО ВЛИЯЕТ НА ЭКОНОМИЧЕСКОЕ ПОВЕДЕНИЕ УЧАЩИХСЯ?

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**Аннотация.** *Введение.* Перед образовательными сторонами по-прежнему стоит задача противостоять развитию технологий, которые имеют как проблемы, так и возможности в различных сферах человеческой жизни. Исследований о влиянии цифровой грамотности на экономическое поведение недостаточно. Отсутствие более широкого понимания связи цифровой грамотности в экономической и управленческой литературе с экономическим поведением студентов побудило провести систематический обзор литературы для выявления и обобщения существенных пробелов в литературе. Несмотря на то что было проведено несколько обзоров экономического поведения, они не связаны непосредственно с предпринимательской грамотностью и цифровой грамотностью. Большинство исследований ориентированы на изучение потребительского или финансового поведения, а также на финансовую грамотность в качестве основного объекта.

*Цель.* Это исследование направлено на выявление взаимосвязи между экономической, предпринимательской и цифровой грамотностью и экономическим поведением учащихся.

*Методология, методы и методики.* В настоящей работе применялся систематический обзор статей, опубликованных в базах данных Scopus, Web of Science, EBSCOhost и ProQuest, с использованием предпочтительных элементов отчетности для систематических обзоров и метаанализа (PRISMA), что полезно для получения более подробных результатов и уменьшения возможных погрешностей.

*Результаты и научная новизна.* Результаты исследования показывают, что экономическая, цифровая и предпринимательская грамотность могут влиять на экономическое поведение студентов, а также что существует тенденция к увеличению экономического поведения в последние годы в Индонезии и некоторых странах. Таким образом, было подтверждено, что экономическая и цифровая грамотность необходимы для прогнозирования экономического поведения с точки зрения потребительской и производственной деятельности. Между тем роли предпринимательской грамотности в объяснении экономического поведения студентов уделяется меньше внимания. Благодаря полученному результату будущие исследователи в данной теме смогут изучать эти переменные, используя определенный метод и подход.

*Практическая значимость.* В результате настоящего исследования дается практическое предложение ученым в области экономики и предпринимательства рассмотреть перечисленные переменные. Кроме того, в работе обобщаются несколько пробелов в исследованиях в области образования, экономики и менеджмента, которые представляют собой основу для проведения будущих изысканий, связанных с экономическим поведением.

*Ключевые слова:* экономическое поведение, цифровая грамотность, экономическая грамотность, предпринимательская грамотность.

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## ALFABETIZACIÓN ECONÓMICA, DIGITAL O EMPRENDEDORA: ¿QUÉ INFLUYE PARA IMPULSAR EL COMPORTAMIENTO ECONÓMICO DE LOS ESTUDIANTES?

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**Abstracto. Introducción.** Los actores educativos continúan enfrentando el desafío de asumir el desarrollo de la tecnología, que presenta tanto cuestiones a resolver, como oportunidades en diversas áreas de la vida humana. Hace falta efectuar investigaciones sobre el impacto de la alfabetización digital en el comportamiento económico. La falta de una comprensión más amplia de la relación entre la alfabetización digital en lo referente a literatura en economía y gestión, y el comportamiento económico de los estudiantes impulsó una revisión sistemática de la literatura para identificar y resumir lagunas significativas en la literatura. La mayoría de los estudios se han centrado en el comportamiento financiero o del consumidor, teniendo a la educación financiera como punto focal.

**Objetivo.** Este estudio tiene como objetivo identificar la relación entre la alfabetización económica, empresarial y digital y el comportamiento económico de los estudiantes.

**Metodología, métodos y procesos de investigación.** Para la ejecución de este trabajo se llevó a cabo una revisión sistemática de artículos publicados en las bases de datos Scopus, Web of Science, EBSCOhost y ProQuest utilizando Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA), lo cual es útil para obtener resultados más detallados y reducir posibles sesgos.

**Resultados y novedad científica.** Los resultados de la investigación indican que la alfabetización económica, digital y empresarial puede influir en el comportamiento económico de los estudiantes, y que existe una tendencia creciente en el comportamiento económico en los últimos años en Indonesia y otros varios países. Así, se confirmó que la alfabetización económica y digital son necesarias para predecir el comportamiento económico en términos de actividades de consumo y producción. Mientras tanto, el papel de la alfabetización empresarial a la hora de explicar el comportamiento económico de los estudiantes ha contado con menos atención. Gracias a este resultado, los futuros investigadores en este tema podrán analizar estas variables utilizando un método y enfoque específico.

*Sentido práctico.* Este estudio proporciona una sugerencia práctica para que los estudiosos de la economía y emprendimiento consideren estas variables. Además, el artículo resume varios vacíos en el aspecto investigativo relacionado con la educación, economía y gestión que proporcionan una base para futuras investigaciones relacionadas con el comportamiento económico.

**Palabras claves:** comportamiento económico, alfabetización digital, alfabetización económica, alfabetización empresarial.

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## Introduction

In recent years, there has been a challenge for educational sides to confront the advancement of technology that has both challenges and opportunities in various sectors of human life [1]. Since the matter of this theme, the studies on the impact of digital literacy and economic behaviour are insufficient. The lack of a broader understanding of the involvement of digital literacy in the economic and management literature with economic behaviour of students has motivated to perform a systematic literature review to identify and synthesise essential gaps in the literature. Despite there being several reviews in economic behaviour, it is not connected specifically to entrepreneurial literacy, and digital literacy. Most studies are taking a stance on investigating consumption behaviour or financial behaviour, as well as involving financial literacy as the major.

This study aims to answer the following questions:

1. How has research on the economic behaviour of students evolved over the years?
2. How does economic literacy promote the economic behaviour of students?
3. How does digital literacy drive the economic behaviour of students?
4. How does entrepreneurial literacy impact the economic behaviour of students?

Thus, we addressed these questions by involving the research in the theme of economics, management, and psychology over the last five years. Using this systematic literature review, this paper offers unique insights due to its rigorous and systematic approach to synthesising existing research evidence on particular research questions.

This paper builds on and contributes to some literatures. First, we add growing evidence on how economic, entrepreneurial, and digital literacy can affect the economic behaviour of students. This research departs from the conceptual and literature review by showing that literacy can matter for promoting behaviours. Published works of literature have examined the determinant factor of consumption behaviour [2–5], while this study concerns economic behaviour in productive and consumptive behaviour that is overlooked by other scholars. Lastly, this paper advances this literature by suggesting that literacy can sharpen economic behaviour.

This study aims to collect and review the existing studies that examine the impact of economic literacy, entrepreneurial literacy, and digital literacy on economic behaviour. However, this study has a limitation in involving many databases since there is a limited study that incorporates digital, economic, and entrepreneurial literacy in linked with economic behaviour.

## Literature Review

Economics is an essential field of study as it helps people to understand choices and opportunities. N. G. Mankiw noted that economic phenomena are linked to any aspect of economic behaviour that incorporates with resources allocation [6]. S. Nurjanah et al., and S. Suratno et al. reported that economics is about people and how they organise the limited resources to accomplish needs and wants in enhancing individuals' and community well-being [2, 7]. Economic behaviour is an action performed by each individual in daily activities [6]. M. Sutter et al. defined economic behaviour as the individual's determination in various economic activities, i.e. consumption, production, distribution, saving, and investment [8]. S. N. Qomariyah, and S. H. M. Lyn and S. Sahid mentioned that each individual is an economic actor, who will behave economically in his/her daily activities [9–10].

According to E. G. Kostyleva et al., the immersion in technology has led to a transition in economic behaviour, and it has impacted various sectors, forcing students to face numerous challenges and opportunities [11]. As a result, it has been more complex, and social pressure is increasing for students to be wiser as consumers and producers. In this matter, decision-making is viewed as one of the most crucial phenomena for understanding how people behave [12]. In the decision-making process, individuals need to consider several choices and sometimes sacrifice others since they face scarcity [6]. To deal with these issues, universities have attempted to integrate some components that matter for students, i.e. economic literacy, digital literacy, and entrepreneurial literacy.

In view of T. Kaiser and L. Menkhoff, economic literacy concerns having and applying economic knowledge in daily economic decisions [12], while E. James and S. Sahid concluded that entrepreneurial literacy is essential to enlarge the existing potential or create new entrepreneurship opportunities [13]. A large number of studies by S. Nurjanah et al., R. Efendi et al., and B. Surindra demonstrated that economic literacy can benefit an individual regarding their behaviour, primarily related to consumption behaviour [2–4]. Indeed, S. Lestari et al. also remarked that having economic literacy facilitates a greater consumption decision than the existing budget constraints [5]. Furthermore, B. Magistro and A. Soroko stated that economic literacy is essential for each student, and it deals with financial decisions [14–15]. The studies by R. Efendi et al., and A. Soroko mentioned that economic literacy helps individuals to be a wiser in confronting economic decisions [3, 15].

At the same time, K. Kusumadewi and R. Sulistyowati noted that entrepreneurial literacy allows an individual to understand entrepreneurship with various positive, creative, and innovative characteristics in developing business opportunities into

business opportunities that benefit themselves and the community or consumers [16]. Suratno et al., and S. H. M. Lyn and S. Sahid defined entrepreneurial literacy as an individual's skill to recognise and utilise economic concepts to deal with entrepreneurship decision and enhance economic well-being [7, 10]. Indeed, K. Kusumadewi and R. Sulistyowati considered entrepreneurial literacy as the individuals' competence to deal with social and economic issue by promoting new business creation [16].

Furthermore, digital literacy also plays an essential role in determining the economic behaviour of students. The preliminary study by B. Surindra also found that influences students' consumptive behaviour [4]. However, a large number of studies in the Indonesian context consider digital literacy as a predictor of economic behaviour or entrepreneurship behaviour. Digital literacy is a concept that aims to connect technology and users to practice digital technology productively. Therefore, according to N. S. B. N. S. Bahri et al., this ability is considered to have been mastered by someone if the user can use it productively to the economic value [17]. For students, this ability is relevant to enhance entrepreneurial activities, whose primary goal is to gain economic benefits. In addition, having digital literacy will benefit students or individuals to be more selective in making decisions after involving digitalisation in the decision-making process.

## **Methodology, Materials and Methods**

### ***Research Design***

This study adopted a systematic review approach that allows authors to involve existing literature on the theme of students' economic behaviour to address the provided research questions. Systematic literature review and the outcomes of the prior studies are investigated for the identification of re-occurrence and providing data synthesis. The protocol applied in this study adopted the PRISMA flowchart (see Figure 1).

#### **Data Collection and Search Process**

We conducted our search from 2017 to 2022 from Scopus, Web of Science, ProQuest, and EBSCOhost databases. First, we performed a comprehensive search of education, economic, business, and management literature databases, and after discussions with the author team, we proposed the literature search string aimed at those studies that relate to students' economic behaviour, entrepreneurial literacy, economic literacy and digital literacy. In the strings' construction, the Boolean expressions, AND, OR, were applied to perform selected variables. In detail, the search string for the databases is provided in Table 1.

Table 1

Search strings in Scopus, Web of Science, EBSCOhost, and ProQuest

Databases	Keywords
Scopus	TITLE-ABS-KEY ("economic literacy" OR "entrepreneurial literacy" OR "digital literacy") AND ("economic behaviour" OR "consumptive behaviour" OR "consumption behaviour" OR "rationale behaviour" OR "students' entrepreneurship" OR "students' business")
Web of Science	(((((AB=(economic literacy)) OR AB=(digital literacy)) OR AB=(entrepreneurial literacy)) AND AB = (students' economic behaviour)) OR AB=(students' consumptive behaviour)) OR AB = (students' entrepreneurship behaviour)
EBSCOhost	AB (economic literacy OR digital literacy OR entrepreneurial literacy) AND AB (consumptive behaviour OR students' consumption behaviour OR economic behaviour OR students' business)
ProQuest	("economic literacy" OR "digital literacy" OR "entrepreneurial literacy") AND ("consumptive behaviour" OR "consumption behaviour" OR "economic behaviour" OR "students' entrepreneurship")

***Inclusion and Exclusion Criteria***

The inclusion and exclusion criteria were performed considering the appropriateness of papers for further analysis (see Figure 1). In this stage, the searched papers from the databases of Scopus, Web of Science, EBSCOhost, and ProQuest were transferred into an Excel database. The search resulted in 34 papers in the database Scopus, 383 papers in Web of Science, 77 in EBSCOhost, and 117 papers in ProQuest. The information provided in were included the author(s), title, keywords, year of publication, publisher name, language, country, and abstract. In this study, we applied the exclusion criteria, including non-English papers, papers published in the proceeding, papers that cannot be accessed online, papers that are not relevant in the field, and articles that are not published during 2017–2022, and editorial papers. At the same time, the inclusion criteria covered papers published in Scopus, Web of Science, ProQuest, and EBSCOhost databases, studies related to economic literacy, entrepreneurial literacy, digital literacy, and economic behaviour.

**Results**

This systematic literature review aims to investigate the relationship between economic, entrepreneurial, digital literacy, and students' economic behaviour using the data from preliminary papers. In this study, we adopted a PRISMA flowchart to determine eligible papers (see Figure 1). The search in the database (Scopus, Web of Science, EBSCOhost, and ProQuest) resulted in 611 articles. As informed in the prior section, we performed criteria for including and excluding papers. From the 611 papers collected, 13 papers were eliminated since it was provided in non-English papers (e.g. Bahasa Indonesia, Malay, Spanish). Furthermore, we removed 473 papers that are not relevant in the field of the study in order to answer the research questions. We also deleted 67 papers that were published in other scope of



education, economics, management, business, and psychology. In the step of finding the eligible paper, we also sorted 7 duplicate articles and 1 missing information method in that article. Finally, we incorporated 15 papers for analysis and synthesis purposes. More precisely, the eligible papers included in this systematic review are provided in Table 2.

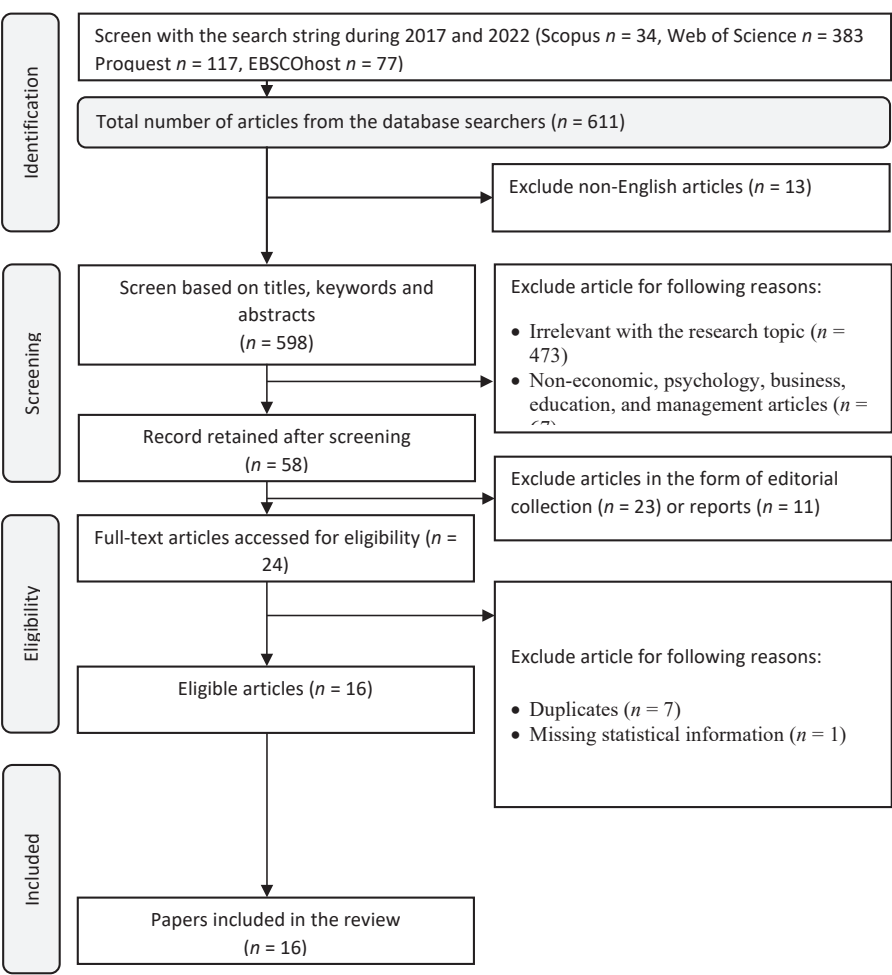


Fig. 1. Prisma flowchart



Table 2

The resume of eligible papers included in this study

Year	Author	Country	Method	Research purposes
2020	T. Sariwulan et al.	Indonesia	Path analysis	Investigating the interconnectedness between digital literacy, economic literacy, entrepreneurial understanding, and SMEs performance [21]
2021	S. Suratno et al.	Indonesia	Structural equation modelling	Examining the mediating role of economic literacy in predicting students' intention for entrepreneurship [7]
2022	M. Setiawan et al.	Indonesia	Structural equation modelling	Understanding the connectivity between digital financial literacy in determining saving and spending behaviour among youth in Indonesia [18]
2020	Y. Kadoya & M. S. R. Khan	Japan	Linear regression	Predicting individual behaviour from the perspectives of financial literacy [19]
2021	E. Munoz-Cespedes et al.	Spain	Anova	Investigating nexus between financial literacy and sustainable consumption behaviour [20]
2020	S. Suparno et al.	Indonesia	Multiple regression	Examining the impact of entrepreneurship education, economic literacy, digital literacy and Indonesian students' entrepreneurship behaviour [22]
2018	N. D. Philippas & C. Avdoulas	Greece	Logistic regressions	Recognising connectivity between financial literacy and students' well-being [29]
2019	R. Efendi et al.	Indonesia	Multiple regression	Investigating the mediating role of economic Literacy in driving impulsive buying of students in Indonesia [3]
2022	B. Surindra	Indonesia	Multiple regression	Examining economic and digital literacy in affecting consumptive behaviour among Indonesian students [4]
2022	K. Kusumadewi & R. Sulistyowati	Indonesia	Linear regression	Presenting the link between digital literacy and entrepreneurship behaviour of SMEs in Indonesia [16]
2022	E. James & S. Sahid	Malaysia	Multiple regression	Understanding the relationship between entrepreneurial literacy and entrepreneurship behaviour among Malaysian [13]
2021	S. H. M. Lyn & S. Sahid	Malaysia	Multiple regression	Investigating the nexus between economic literacy and financial behaviour in Malaysia [10]
2020	R. V. S. P. K. Ranatunga et al.	Sri Lanka	Structural equation modelling	Examining the role of digital literacy in explaining business uncertainty and economic performance of SMEs in Sri Lanka [27]
2021	D. R. Zahra & P. Anoraga	Indonesia	Multiple regression	Analysing the impact of lifestyle, financial Literacy, and consumptive behaviour in Indonesia [24]
2021	N. S. B. N. S. Bahri et al.	Indonesia	Linear regression	Understanding the connectivity between digital literacy and entrepreneurial behaviour [17]
2020	M. Hasan et al.	Indonesia	Linear regression	Analysing the causality between entrepreneurial literacy, financial literacy and entrepreneurial activity of students [23]

The publishing year of research ranged from 2017 to 2022. The majority of the reviewed papers were performed in Indonesia, followed by Malaysia and other countries, i.e. Greece, Japan, Spain, and Sri Lanka. Findings, related to countries and the number of the conducted research, are illustrated in Table 3. In addition, the participant of the study involved in the literature search is provided in Table 4. The analysis results mentioned that entrepreneurial, economic, and digital literacy are taking different roles for students and businesses. However, it has the same purpose of achieving more welfare. The surprise result is that financial literacy is also essential to predict students' and business behaviour, which is proven by three papers that mentioned this matter [18–20].

Table 3

Respondents involved in the review

Respondents	No. of performed research
Students	8
Small and medium business	5
Youth	3

### ***The Role of Economic Literacy***

Studies under the present literature review indicated that economic literacy takes an essential role in predicting economic behaviour. It is found that five studies involved economic literacy as the variable that successfully impacts the behaviour of students [3, 10, 12, 21, 22]. The majority of studies agreed that economic literacy is related to understanding and applying the basic concept of economics in daily activities [19–20]. Meanwhile, the form of economic behaviour in mentioned studies is related to consumption or consumptive behaviour and productive activities in terms of entrepreneurship [7]. Reviewed papers argued that economic literacy is highly related to an individual's knowledge and attitudes that help them to deal with economic or financial decisions. For instance, a prior study by S. H. M Lyn and S. Sahid mentioned that economic literacy plays a great role in dealing with the consumption pattern, and having this literacy will avoid family debt issues [10]. M. Sutter et al.'s research showed that economic literacy can take role as a mediator for predicting individual behaviour [8]. Lastly, S. H. M. Lyn's and S. Sahid's research on the relationship between economic literacy and financial behaviour concluded that economic literacy is an essential aspect of life that individuals should possess to cope with this challenging era [10]. The aforementioned study by S. H. M Lyn and S. Sahid also showed a robust correlation between this relationship [10].

### ***The Role of Entrepreneurial Literacy***

The surprise result is that the role of entrepreneurial literacy has been recognised by two papers involved in this study. Hence, we argued that the topic of entrepreneurial literacy is overlooked by prior studies in the field of education, economics, business, and management. The existing studies, for instance, a study by E. James and S. Sahid documented that entrepreneurial literacy is related to

attitudes, thoughts, concepts, and behaviour in entrepreneurship activities [13]. The study by K. Kusumadewi and R. Sulistyowati also found that entrepreneurial literacy can have a great role in determining productive activities in entrepreneurship [16]. Indeed, a study M. Hasan et al. mentioned that entrepreneurial literacy can explain the inclining of students' entrepreneurial intention [23]. Surprisingly, the reviewed papers do not show the role of entrepreneurial literacy in determining students' economic behaviour in terms of consumption activities. Therefore, due to this incompletely investigated issue, there is the opportunity for future scholars to involve entrepreneurial literacy in promoting the economic behaviour of students.

### ***The Role of Digital Literacy***

The role of digital literacy has been acknowledged by four studies in predicting both consumption and entrepreneurial behaviour. B. Surindra and N. S. B. N. S. Bahri et al. reported that digital literacy covers a dynamic combination of mindset, competencies, attitudes, and skills through the adoption of digital information, technology, and media [4, 17]. Surprisingly, the aforementioned studies were only performed in Indonesia context. In general, digital literacy can be provided in terms of digital competencies, skills, and thinking. B. Surindra pointed out that digital literacy is the essential component for students in this digital era and it can be promoted started from family to higher education [4]. The result of the study also remarked that digital literacy through digital competencies can enable students to have a better consumption decision and avoid consumptive activities. On the other hand, T. Sariwulan et al. mentioned that Indonesian business is constrained by some digital skills that make business remain stagnant [21]. Thus, the emergence of digital literacy is essential in sustaining their business and possibly enhancing the market. Indeed, a prior study by S. Suparno et al. remarked that digital literacy will be beneficial for students who want to start a business or enlarge their existing business [22].

## **Discussion of the Results**

This systematic review is performed as an effort to deliver the dynamic role of economic, entrepreneurial, and digital literacy in achieving economic behaviour. The outcomes of this research facilitate the policy researchers and academic scholars in understanding the role of economic, entrepreneurial, and digital literacy in predicting economic behaviour among students. The findings of the study noted the increasing trend of the theme of economic behaviour in the last recent years, primarily in developing countries, such as Indonesia [4, 7, 24]. The primary rationale for this result is that Indonesia is well-known as the "market" country since it has a vast population. Additionally, Indonesia has a bonus demographic, which in turn is dominated by the productive age. Hence, understanding this phenomenon will help the government to set up productive activities for students in entrepreneurial activities that potentially lead to more job opportunities and enhance economic welfare.

The findings from the research by B. Surindra and S. Suratno et al. also remarked that it has a robust link between economic literacy and the economic behaviour of students [4, 8] and the results of T. Sariwulan et al. showed the relationship between economic literacy and business performance [21]. It is reasonable because economic literacy facilitates individuals with some basic economic knowledge that helps them make better economic decisions. Economic literacy is a broad concept, and the related papers revolve around investigating outcomes of economic behaviour [25]. Economic literacy can be performed in economic knowledge, economic attitude, and economic behaviour [7, 25]. Therefore, it is clear that having sufficient economic literacy will directly impact economic behaviour. Thus, the findings also remarked that the outcome of economic literacy aims to have a tremendous economic decision, which affects economic well-being.

In addition to economic literacy, entrepreneurial literacy can also be essential for an individual to deal with new opportunities. However, there is a minor study that involves entrepreneurial literacy as the concept of predicting behaviour. For instance, the research by M. Hasan et al. remarked that entrepreneurial literacy is provided by the attitude, knowledge, and behaviour of entrepreneurship [23]. This implies that entrepreneurial literacy is essential for an individual primarily in looking for new opportunities. Indeed, a preliminary study by K. Kusumadewi and R. Sulistyowati also confirmed that entrepreneurial literacy is important for enlarging business [16]. The studies by K. Kusumadewi and R. Sulistyowati, and N. S. B. N. S. Bahri et al. concluded that entrepreneurial literacy has been successful in predicting individual behaviour in terms of productive behaviour instead of consumptive behaviour [16–17]. The inclination of entrepreneurial literacy can be captured from the closest environment of the individual, including family and entrepreneurship education in the schools [7, 13]. This is also relevant since some prior studies, for instance, E. James and S. Sahid, S. Suparno et al., and P. H. Prayitno et al. confirmed the role of entrepreneurship in providing new job opportunities and poverty alleviation [13, 22, 26].

On the basis of our findings, it can be argued that the role of digital literacy is crucial for individuals. The basic rationale is that the advancement of technology leads to more challenges and opportunities for students, individuals, and businesses to take their degrees as consumers or producers. The engagement of digital literacy skills to enhance the quality of students' capability is an essential issue for the digital learning environment that enables students to deal with choices and opportunities [4, 22]. In addition, digital literacy relates to individuals' skills incorporating information use and evaluation [26]. Digital transformation has the potential to play a significant role in the individualisation of educational processes, particularly through the customisation of learning experiences [27]. This can help students to better understand and engage with the material, which may lead to more rational economic behaviour.

The systematic analysis showed that digital literacy positively affects students' skills essential for coping with economic behaviour [11, 27]. Hence, universities and schools need to incorporate digital literacy for changes in the economic and

business activities from conventional as dominant to online business [28]. In addition, in this fourth industrial education especially related to the knowledge economy, some matters, including creativity, critical thinking, collaboration, and the ability to learn and adapt quickly have become crucial skills. As industries, education systems, and technologies evolve rapidly, the capacity to innovate and create value has gained prominence for students. This condition can lead to a greater emphasis on education and training that fosters creativity among students, as well as a shift in how educational organisations approach talent management and students' development.

## Conclusions

This study is intended to identify the linkage between economic, entrepreneurial, digital literacy, and students' economic behaviour. Our findings indicate that students' economic behaviour has been a significant theme in the last five years, primarily in Indonesia. Our study also remarks that the role of economic, entrepreneurial, and digital literacy is different depending on the context of the study. Economic and digital literacy is powerful in predicting consumptive and productive behaviour, while entrepreneurial literacy can solely explain productive behaviour. This study provides an insight into economic, entrepreneurial, and digital literacy as essential components for students in dealing with decisions in economics. It might be valuable for universities, scholars, and policymakers to involve in the education and curricula. In addition, it is necessary to more fully reveal the role of digital transformation in the individualisation of the consumer value of educational processes in order to achieve effective socialisation and more responsible students' economic behaviour, to substantiate the existing contradictions in the formation and development of entrepreneurial competencies, the potential of students.

As other studies, this systematic literature suffers some limitations. First, a relatively small number of investigated papers may limit the quality of the reported results. For this reason, further research can enlarge other databases to provide better results. Second, the determination of eligible papers was provided by three authors, and it raises the potential bias. Therefore, further studies can elaborate on more independent expertise to determine the eligible paper included in the review. Since the surprise findings on the role of financial literacy, it is expected that further research will involve the variable in predicting economic behaviour. Lastly, future scholars in this theme can enlarge the inclusion and exclusion criteria to involve other journal ranking guides.

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