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Math Teachers' Perceptions Regarding Financial Literacy

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Abstrak

Secara umum covid-19 berdampak diberbagai aspek kehidupan, terutama dalam bidang finansial. Kurangnya pengetahuan individu mengenai finansial menyebabkan masalah terhadap kehidupan. Kenyataannya literasi finansial sudah terdapat di dalam kurikulum. Hal ini mendorong penelit untuk mengetahui persepsi guru matematika terhadap literasi finansial. Penelitian ini menggunakan deskriptif kualitatif. Subyek dalam penelitian ini adalah semua guru matematika di SMP Negeri 18 Palembang yang berjumlah 6 orang. Metode yang digunakan dalam penelitian ini yaitu triangulasi. Teknik pengumpulan data menggunakan angket tipe terbuka. Berdasarkan hasil analisis data angket didapatkan bahwa kurangnya pengetahuan guru-guru matematika mengenai literasi finansial. Oleh sebab itu penelitian ini merupakan penelitian awal bagi peneliti untuk melakukan penelitian lanjutan mengenai literasi finansial.
Kata Kunci: literasi finansial; PMRI; PISA; Persepsi Guru.

Abstract

Covid-19 has affected various aspects of life, especially in the financial sector. The lack of financial literacy causes problems in life. In fact, financial literacy has already been infused in the curriculum. This prompted this study to find out the perception of math teachers on financial literacy. This descriptive qualitative study involved six teachers at SMP Negeri 18 Palembang. The method used in the study was triangulation. The data was collected through an open-type questionnaire. Based on the results of the questionnaire data analysis, it was found that mathematics teachers lacked knowledge regarding financial literacy. Therefore, this study was a preliminary study for other studies to further investigate financial literacy.
Keywords: Financial Literacy; PISA; PMRI; Teacher's Perception.

I. INTRODUCTION

Financial literacy education is essential for students because it affects children's ability to manage finances properly in the future. Financial literacy knowledge should be provided both at home and at school (Rahmawati, Cholily, & Zukhrufurrohmah, 2023). In the curriculum, financial literacy is one of the required literacies to be mastered by students.

Financial literacy is knowledge and ability to manage finances as well as make decisions and policies effectively by utilizing available financial resources (Amanita, 2017).

Mathematical literacy and financial literacy are two important literacies in education. The concept of mathematical literacy specifically involves understanding mathematics, doing mathematics, and being interested in mathematics (Van de Walle et al., 2007).

In the 2018 Program for Assessment of PISA International Students, financial literacy was indicated by the knowledge and understanding of financial concepts and risks, as well as the skills, motivation and confidence to apply the knowledge and understanding to make effective decisions in a variety of financial contexts, to enhance the financial well-being of individuals and society, and to enable participation in economic life (OECD, 2018; Masfufah & Afriansyah, 2021).

At the present time, people who have opportunities to contribute and achieve higher level of life are not limited to those who are able to understand certain sciences (Nurrawi et al., 2023). Communities are required to utilize the information to be more critical and savvier in receiving and processing the information obtained. Education has a very important role in facing these challenges (Chandra & Listiani, 2023). Financial literacy is related to mathematics lessons, which is one of the compulsory subjects at school, encouraging the ability to count and use formulas, involve reasoning and analytical skills in solving everyday problems.

Mathematics lessons are given in schools from elementary to high school level (Diva & Purwaningrum, 2023). The general objectives of giving mathematics are: (1) to prepare students to be able to deal with changing circumstances that are increasingly developing, through practice acting on the basis of logical, rational, critical, accurate, honest, effective and efficient thinking; (2) to prepare students to be able to use mathematics and think mathematically in everyday life (Habibi, 2014). The role of mathematics is very important, especially in solving everyday life problems, for example in the field of financial literacy.

People with financial literacy culture are able to manage the issues of money and prices as well as their family and personal financial budgets, including the management of financial assets and debts as a life-changing (Iqrima, Zulkarnain, & Kamaliyah, 2023). Financial literacy is a specific aspect of the economic literacy (Septia & Wahyu, 2023). Economic literacy includes the ability to secure income, determine the consequences of personal decisions toward the present and future income, determine the orientation in the labor market, and make decisions regarding spending, and so on (Tomaskova, et.al. 2011).

According to Chen and Volpe, financial literacy shows a financial understanding of general knowledge of investment, savings and insurance (2002). An individual with an understanding of higher financial literacy showed a better economic life, thereby facilitating their financial decision making (Lusardi and Mitchell, 2014).

Based on this understanding, it is implied that one of the abilities to develop today is financial intelligence, namely intelligence in managing personal financial assets. By applying the correct method of financial management, it is expected to get the maximum benefit of the available resources.

There are three financial decisions to make, namely; 1) how much should income be consumed each period?; 2) is there any excess income and how is it invested?; and 3) how to finance the consumption and investment. In order to achieve financial well-being, an individual needs to have personal financial knowledge, attitudes and implementation, to what extent the knowledge, attitudes and implementation in managing finances is known as financial literacy.

Encouraging the values of financial literacy as early as possible will greatly affect the understanding and knowledge of literacy itself and also the level of well-being in the future. Financial literacy is not only learning about financial literacy, but also the ability to manage finances wisely and appropriately. Financial management has a very important role in determining the level of individual and family welfare. Family financial difficulties can stem from inadequate financial knowledge and are related to the physical health of individuals and families (Wilson, 2003).

To avoid financial problems, everyone needs knowledge about financial literacy. Financial difficulties can arise if there is an error in managing finances, such as using the wrong credit card and not having financial planning. In several countries, financial literacy has even been declared a national program. The results of the study show that the level of financial literacy is still low in developed countries, especially in developing countries, including Indonesia (Amanita, 2017).

Financial problems do not only arise due to a lack of income, but also due to financial mismanagement that is adjusted to the amount responsibility of each individual. The importance of financial literacy is due to several things. One of them is that consumers with good financial literacy are proven to be able to go through difficult financial times (Bhushan & Medury, 2013; Wijaya & Yusup, 2023). Financial literacy is also positively correlated with financial behavior, namely paying bills on time, loan installments, savings before they run out and using credit cards wisely. This literacy is one of the fundamental things for every individual to avoid mistake in making financial decisions.

Learners will be assisted to have the ability to understand, assess, and act on their financial problems through effective and efficient learning (Afriansyah, 2022). The existence of good literacy from an early age is expected that students are able to have a prosperous life in the future.

The financial literacy framework is classified according to the content, process, and context. Financial literacy content consists of areas of knowledge and understanding to perform certain tasks. The four content areas for PISA financial literacy are: money and transactions, financial planning and management, risk and reward, and the financial landscape (Lisnani & Inharjanto, 2023). Process categories involves cognitive processes. Such content is used to describe students' abilities to recognize and apply domain-relevant concepts, and to understand, analyze, reason about, evaluate and suggest solutions.

In PISA financial literacy, four process categories have been defined: identifying financial information, analyzing information in a financial context, evaluating financial issues and applying financial knowledge and understanding (Purnomo & Sari, 2021). The context of financial matters often depends on the context or situation in which they are presented. By placing tasks in a variety of contexts, this assessment offers the possibility to connect with the widest possible range of individual interests in various situations in which individuals need to function in the 21st century.

Contexts identified for assessment of financial literacy are education and work, home and family, individual and community (Afriansyah & Turmudi, 2022). In Indonesia, financial literacy education is still very rarely carried out both in the family and at school. In Indonesian culture, it is taboo to talk about money in front of children. It explains why financial knowledge, attitudes and skills have not received sufficient degree to be learned in schools. Therefore, there is an argument that financial literacy was not a life skill that must be imparted to children.

According to (Astuti, 2013) Indonesian in carrying out consumption activities, in terms of purchasing goods based on preferences and interest in models of attractive goods, purchase goods without considering the prices, benefits and uses of the goods. Buying expensive or well-known brands will lead to high self-confidence, and other behaviours of purchasing, namely: purchasing similar goods but from different brands, purchasing to maintain self-appearance and prestige, and purchasing to maintain status symbols. To prevent such behaviours, students are required to understand financial literacy skills. Individuals with good financial knowledge will be able to make wise decisions in this regard. This is in line with (Krishna, 2010) which stated that financial literacy was a person's ability to obtain, understand, and evaluate relevant information for decision making by understanding the resulting financial consequences.

Lack of understanding and knowledge about financial literacy is one of the factors causing the financial crisis, so that financial literacy is now globally recognized as an important part of economic, financial and development stability (Mangelep & Kaunang, 2018). The importance of financial literacy knowledge for the community has prompted the OECD to include this competency as a measure in PISA.

The ability to personally manage finances is needed by individuals to optimally utilize financial products that will affect life quality (Cahyani & Sritresna, 2023).

The concept of financial literacy involves the ability to use knowledge and skills to make the right financial decisions confidentially (Lusardi, 2012; Pebrianti & Puspitasari, 2023). In PISA 2018, financial literacy is defined as knowledge and understanding of financial concepts and risks, and the ability, motivation and confidence to apply the knowledge and understanding to make effective decisions in a variety of financial contexts, to improve the financial well-being of individuals and society, and to participate in economic lives (OECD, 2019; Ulkhaq, 2023).

Financial literacy education in schools is necessary because it introduce the money management and concept of wise financial management and allows students to control financial spending by distinguishing ‘need’ and ‘desire’ (Saputra, Sofyan, & Mardiani, 2023). Based on the description above, the formulation of the problem in this study was how mathematics teachers perceive financial literacy. The purpose of this study was to determine the perceptions of math teachers towards financial literacy.

II. METHOD

This study used a qualitative descriptive approach. Qualitative research is a study conducted on natural objects, developed as what was present in the setting without any treatments (Sugiyono, 2014).

Descriptive statistics are statistics that describe or provide an overview of the object under study through sample or population data, without analyzing and making general conclusions (Sugiyono, 2014). This study aimed to describe the perceptions of mathematics teachers on financial literacy.

The participants are the data sources whose information was requested according to the research problem (Arikunto, 2012). As for the source of data in this study, the participants were all teachers at SMPN 18 Palembang, totaling 6 people. Data collection technique used was through an open-ended questionnaire.

III. RESULT AND DISCUSSION

Financial literacy is often perceived as the implementation of skills dealing with financial problems, such as making withdrawals or transfers.

The need for financial literacy education for children today is very necessary not only for their future, but also for an increasingly complex life. NCEE (National Council On Economic Education) in (Seefeldt, 2010) suggested that all children must be able to: (1) manage personal finances, (2) understand and appreciate the role of workers who produce products and services, (3) withdraw from the economic system and understand how the system works, (4) think critically about economic issues, feel responsible, understand basic economic concepts, make economic decisions, and reason logically about current issues that impact their lives, (5) be ready to participate in economic productive activities aiming to prepare for their future careers.

(OECD, 2006) stated that the main obstacle in implementing financial literacy education in a country was in the lack of political will, lack of resources and teaching materials. To succeed the financial literacy education in schools, the first step to be conducted was the government's commitment to support this literacy in schools. The application of financial literacy must be continuous. From elementary to tertiary level adjusted to the level of children mental development at each level.

The results obtained from the questionnaire regarding mathematics teacher's description of financial literacy found that the term financial literacy was barely recognized. Lack of understanding of the importance of financial literacy knowledge in children's lives in the future prevented the teachers to give guidance. On the other hand, the participants recognized the term PISA and PMRI stating that these terms were familiar to them. The interview confirmed that the teacher had taught financial literacy under the term social arithmetic. This finding was the basis to educate both teachers and students regarding financial literacy in everyday activities. Therefore, the context of the learning materials referred to the use of financial contexts in everyday life.

(OECD, 2006) provided several guidelines that can be applied by a country to run the implementation of financial literacy education in schools well. These steps include:

1. Financial literacy education in schools should be part of the national strategy.
2. Constructing a learning framework that clearly included objectives, learning outcomes, content, pedagogical approach, resources and evaluation plan.
3. Financial literacy starts as early as possible, since the beginning of formal schools.
4. Financial literacy education should ideally be a core part of the school curriculum.
5. Teachers should be adequately trained to have sufficient knowledge of financial literacy and understand relevant pedagogical methods.
6. Financial literacy education must be accessible, objective, high quality, supports effective learning tools, and pedagogical resources should be available to schools and teachers appropriate to the level of education.
7. Student progress must be assessed and recognized for their achievements.
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Central and regional governments have an important role on the successful implementation of financial literacy education in schools. The availability of competent teachers and quality teaching materials is also very much needed in the implementation of financial literacy in schools. All of these supporting factors must work continuously and start as early as possible so that financial literacy education can run well.

The financial literacy improvement program is expected to be able to create an Indonesian society that is well literate. In this case the Indonesian are expected to have extensive knowledge regarding financial institutions and financial products and services, have the skills to assess the benefits and risks of financial products and services and trust financial institutions, products and services. One of the literacy improvement programs was through financial literacy education at all levels of formal education.

Financial literacy education is very important to early age. Like education in general, financial education was a process that can be started early to shape a child's ability to make financial decisions. Financial decisions could affect on how to gain access to education, property assets and savings to improve welfare. (Greenspan, 2006) cognitive ability was a fundamental factor that influences financial literacy skills which worked effectively at early developmental stage infusing financial literacy values.

School institutions played an important role as an effective academic environment in providing financial literacy education knowledge to the students. Joint commitment and synergy of all parties were needed for the success of instilling financial literacy values through the family or school (Subroto: 2011). According to Laila (2019) the implementation of financial literacy could be encouraged by teaching financial literacy education according to the basic competencies that had already existed in subjects, such as Mathematics.

Implementation of financial literacy education in schools could provide a positive attitude of students to participate in production activities and motivate to make savings. Teachers could teach financial literacy education in accordance with existing basic competencies in subjects, such as Mathematics. According to (Laila & Hadi, 2019) the financial literacy program aimed to provide students an understanding, especially their responsibility to money management. The ability to manage personal finances was needed by individuals both now and in the future to optimally utilize financial products that affected future welfare.

However, the investigation reported that the program had not been fully implemented effectively, especially regarding learning mechanisms as the barriers for increasing financial literacy skills. The use of standardized curriculum and teaching materials that were applicable in understanding and implementing financial literacy programs had not been carried out.

According to Beverly and Clancy (2001), financial education in a family was significantly needed to assist children in managing allowance and savings that prevented them to be excessive buyers. Furthermore, children were often not prepared with good financial education thereby increasing children's chances of growing into adults without the knowledge and ability to manage money properly. In addition, there were also indications that parents rarely or never even discussed financial education with their children. Therefore, children lacked knowledge of managing money properly. Similar to Williams, it was emphasized that parents' perceptions of money were a significant source of children's financial knowledge. This meant that the role of parents to provide financial knowledge was necessary to teach children the financial literacy in money management in the future.

IV. Conclusion

From the findings, it was found that the teachers' knowledge regarding financial literacy was still lacking. This was due to unfamiliarity of the term "financial literacy". Despite the unfamiliarity, some of the financial literacy value actually had already been taught under the term "social arithmetic". However, the focus on instilling financial literacy values had not been met thoroughly.

As the first and biggest community and the first environment for children to understand foreign worlds, school was a very effective place to initially provide the values of financial literacy education to children. Regarding the implementation, comprehensive steps were required to conduct the process of teaching financial literacy education well. Likewise at the national level, the inclusion of financial literacy material into the curriculum was the basis for the teaching to improve the financial literacy.

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