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Needs of Competencies in Financial Literacy for Youth with Intellectual Disabilities

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ABSTRACT

This study aims to analyze the need for financial literacy competencies in cognitive, psychomotor, and affective aspects for youth with intellectual disabilities at Yayasan Rumah Kampus Pena. The research method used is a mixed method with a case study approach and sequential explanatory design in two stages: a questionnaire instrument with 20 respondents as the subjects for quantitative data and field observation and in-depth interviews with parents, students, and experts for qualitative data. The reliability test of the questionnaire was carried out using the Kuder Richardson formula 20 (KR-20), with supporting analysis from the discriminating power test. In addition, experts analyzed the validity test of the questionnaire items using content validity. Meanwhile, the practitioners approved the observation guidance and interview questions where the research occurred as the results, 1). Financial literacy competencies of most students with intellectual disabilities were below the basic or minimum level of proficiency in financial literacy; 2). Competency Standards for Graduates should include knowledge, skills, and attitudes aspects with content areas of Money and Financial Transactions (Financial Planning and Management; 3). The experts' judgment on financial literacy competencies formulation received a score of 89% in the "Very Good" category by experts.

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1. INTRODUCTION

Nowadays, the world is a rapidly changing place for everyone. In order to survive, we have to prepare ourselves with the knowledge and skills required to live through those waves of changes. Based on The United Nations Convention on the Rights of Persons with Different abilities (UN) (in Hordacre, 2016), this condition may hinder a young person with special needs, such as those who have long-term physical, mental, intellectual, or sensory impairments with various barriers, to participate effectively in society. Therefore, youth with intellectual disabilities must develop aptitude, attitude, and creativity to survive independently.

One of the ways they need to develop is their financial literacy, one of the critical competencies that will empower them to sustain their lives in the 21st century (Goyal & Kumar, 2021; Khalil, 2021; Malik, 2018). The Organization for Economic Co-operation and Development (OECD) told that these groups of youth, with knowledge and skills of financial literacy, will have the confidence to support them in making effective decisions to manage their money across a range of contexts (in Hordacre, 2016). The insight of financial literacy developed throughout life integrates skills in basic math, personal experience, attitudes, and values, as well as cognitive and practical financial literacy skills. By learning financial literacy, youth with intellectual disabilities will grow their confidence in asking questions, seeking advice, and making informed decisions about their finances in the future (Darcy & Dowse, 2013; Muir et al., 2017).

In 2016, the Financial Services Authority or Otoritas Jasa Keuangan (OJK) conducted the latest National Survey on Financial Literacy and Inclusion or Nasional Literasi dan Inklusi Keuangan (SNLIK) that showed the financial literacy and inclusion index in Indonesia was at 29.66 percent and 67.82 percent respectively. Considering that OJK, together with the financial services industry, targeted to achieve 75 percent of the financial literacy and inclusion index by 2019 as it was stated in Presidential Regulation No. 82 of 2016 on the National Strategy of Financial Inclusion or Strategi Nasional Keuangan Inklusi (SNKI), then it means that Indonesia is still far behind the targeted numbers on financial literacy and inclusion index (OJK, 2017). Those numbers also show an urgency to spread the awareness of financial literacy for every individual in Indonesia, significantly to insert these matters in the curriculum starting from a very young age so that students will grow their financial literacy over time. However, currently, no specific competencies are being set for youth with special needs about the knowledge and skills according to their needs.

Most young people with intellectual disabilities in Indonesia are in a condition where the family takes care of all their financial matters (Asa et al., 2021; Ningrum et al., 2020; Riany et al., 2016). They have not been exposed to or even had no opportunity to learn about how financial management works. They have no power and ability to afford their healthcare, housing, and employment, which will be a massive privilege for them (Money Advice Service, 2013). These conditions show that they are not regarded as independent, though it mostly happens because they do not have the necessary knowledge and skills of financial literacy. Their dependencies on family and relatives can also hinder them from creating their version of sustainable living even though they have the right to access any financial services and products according to their needs and financial plans for the future. Thus, it will be beneficial to have a financial literacy competency model specifically for youth with intellectual disabilities. This competency model is expected to reduce the gap and inequity in understanding financial literacy among youth with intellectual disabilities and their support systems because it is an adaptable yet sequential program used in learning financial literacy

as it can accommodate the youth with intellectual disabilities who come from a wide range of family backgrounds with various financial conditions.

Based on the background of the study stated above, the researcher developed the assessment tools to analyze these competencies for youth with intellectual disabilities in both cognitive and psychomotor aspects. This article describes the need for financial literacy competencies for them, given the reliability and validity of these assessment tools. Hence, the need for analysis of financial literacy for youth with intellectual disabilities led to the development of a competency model to be used as a guideline for planning their finances in the future. This adaptable competency model will allow them to make a specific financial plan according to their needs in the future. This model of financial planning competency can also be easily accessed and independently used by these youth with intellectual disabilities. Therefore, this research's main problem is emphasizing how to develop assessment tools to analyze the needs of financial literacy competencies for youth with intellectual disabilities. Furthermore, these young people with intellectual disabilities will be part of the productive working groups who support the country's development with their potential economics driven in many areas.

2. METHODOLOGY

This research uses a mixed method, a combination of qualitative and quantitative research, to gather more comprehensive, valid, reliable, and objective data (Sugiyono, 2013). The design used in this research is an explanatory sequential design. In this design, the first data to be collected and analyzed is quantitative data, followed by qualitative data collection and analysis (Putra & Hendarman, 2013). The explanatory sequential design method, also called the two-phase model, is initially carried out by gathering quantitative data, then compiling qualitative data to clarify or describe the quantitative results (Ali, 2019). The results of quantitative data provide an essential description of the research problem when analyzed. The collection of qualitative data is needed to improve, expand, or define in more detail the general picture of the problem. This design has the advantage of quantitative and qualitative parts that are identified because the researcher does not need to unify or integrate these two forms of data (Creswell, 2012).

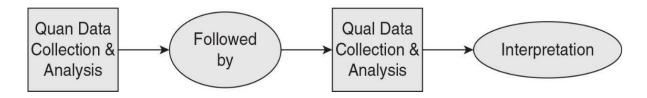


Figure 1. Explanatory Sequential Design (Creswell, 2012)

The subjects of this research were 20 youth with intellectual disabilities who took diploma one (D1) education at the Yayasan Rumah Kampus Pena located at Jalan Kelapa Mas, RT/RW 005/012, Utan Kayu Selatan, Matraman, East Jakarta City, Special Capital Region of Jakarta. Yayasan Rumah Kampus Pena is a higher education institution built explicitly for youth with intellectual disabilities. Those 20 students (aged 18 to 25) were the subjects in this study and were the population or the entire data source. Six of them are female, and 14 are male with intellectual disabilities of autism, down syndrome, speech delay, and sensory integration. The

population of this study is categorized as an accessible population whose boundaries or several units can recognize (Gay, 1987; Ali, 2014).

Research instruments are various tools selected by research techniques to collect data (Ali, 2014). The instrument used in the needs analysis process was a questionnaire as a test instrument of quantitative data in the first phase, supported by in-depth interviews as qualitative data in the second phase. Before the questionnaire was distributed and interviews were conducted, all questionnaire items were reviewed by experts for a content validity test by the description of factors and sub-factors of research variables; there were: financial literacy, instrument measurement, special needs, and lecturers of the respondents. All 25 questionnaire items are made based on cognitive aspects of financial literacy competencies and indicators from the Core Competencies Framework on Financial Literacy for Youth (age 15-18) document that was created by the Organization for Economic Co-operation and Development which covers the area of International Network on Financial Education (OECD/INFE), there are money, income, payment and purchase, price, financial records, foreign currency, financial planning, managing income and spending, saving, long-term planning, and credit.

Data analysis is one crucial step to obtaining research findings that bring researchers to scientific findings. This study's comprehensive needs analysis questionnaire was analyzed using descriptive statistics, including reliability test, content validity test, and discrimination index, by calculating and describing data collected in various forms (Ali, 2014). The calculation of the content validity uses a conversion technique in a dichotomous format with a checklist that generates positive values in the instrument used as a valid measurement tool (Susetyo, 2015). The results of content validity show that 75 percent of experts agree that each questionnaire item is suitable for the cognitive aspect of financial literacy indicators. In other words, the experts declared that the questionnaire items were created to measure the understanding of students with intellectual disabilities of the cognitive aspects by the indicators of financial literacy competencies used by researchers. The questionnaire the respondents filled in was tabulated and calculated using the Kuder Richardson formula 20 (KR-20) to test the reliability of binary variables or the questionnaire with correct and wrong answers (Susetyo, 2015). Based on the calculation, the reliability test result was 0.702, which shows that the entire questionnaire items are at a high level of reliability.

The questionnaire results were also calculated to see the discrimination index of the questionnaire items. The discrimination index is the ability of the questionnaire items to distinguish the participants from the high and low groups (Hanifah, 2014; Naga, 2002). In other words, the more the difference between questionnaire items, the more accurately highgroup participants can answer the questions, and the more complex the participants from the lower group can answer the questions correctly. To be accepted, the discrimination index should be 0.20 or more. In addition, the questionnaires were also calculated to find the difficulty level of each questionnaire item. The questionnaire item with difficulty level 0 is a tricky question, while the item with difficulty 1 is a straightforward one. An excellent level of difficulty index is 0.3 to 0.7. The results show that 7 items had a low discrimination index under 0.20, 15 had an average discrimination index between 0.20 to 0.40, and 3 had a high discrimination index of more than 0.60. Meanwhile, 9 questionnaire items were in the low level of difficulty, 10 were in the middle level of difficulty, and 6 were in the high level of difficulty out of 25 questionnaire items. Data collected from a comprehensive needs analysis process are supported by in-depth interviews with 2 female students, 2 male students, and 2 parents of these students to support the findings.

3. RESULTS & DISCUSSION

This study's descriptive analysis of quantitative data was conducted by calculating the questionnaire results on financial literacy understanding in the cognitive aspects of youth with intellectual disabilities at Yayasan Rumah Kampus Pena. Descriptive analysis is used to provide an overview of the research scores through a questionnaire obtained from the highest score, the lowest score, the average score, the standard deviation and variant, and the categorization of student learning outcomes.

Tabel 1. Results on Frequency Distribution for Understanding Financial Literacy of Youth with Intellectual Disabilities at Yayasan Rumah Kampus Pena

Xi	Fi
1-5	0
6-10 11-15	4
11-15	7
16-20 21-25	9
21-25	0

The table above shows the results of the questionnaire on financial literacy understanding in the cognitive aspects of youth with intellectual disabilities at Yayasan Rumah Kampus Pena, which then obtained results that show a descriptive analysis as in the table below:

Tabel 2. Descriptive Statistics of the Questionnaire for Understanding Financial Literacy of Youth with Intellectual Disabilities at Yayasan Rumah Kampus Pena

	N	Minimum	Maximum	Mean	Sid. Deviation	Variance
Hasil Valid N	20	6	20	13,90	3,93	15,46
(likewise)	20					

Based on the table above, it is shown that the maximum score of youth's financial literacy understanding in cognitive aspects is 20, the minimum score is 6, with an average score is 13.90, a standard deviation is 3.93, and a variance is 15.46. The data obtained in the table above becomes the basis for determining the categorization of learning outcomes where the interval of categorization values is 1-25.

The questionnaire results showed that students could answer easy items about financial literacy. However, when the level of difficulty of the questionnaire items increases, students cannot answer them. For example, when talking about money, students can distinguish which are banknotes and which are coins; however, when students were asked about the value and function of money, more than half of them did not understand. Students understand that work is essential for making money, but they do not know how work can help them make income. Students do not understand the importance and how to create a financial record. Therefore, almost all students are given money to spend in a day by their parents. They claimed that they understand the function of savings, but most students do not have it in large quantities. Students do not understand that goods and services can have different prices. Students also do not understand the components of financial records and how to do long-term financial

planning. However, students know that every country has its currency and understand that it is not suitable for them to be in debt. These results showed a need for financial literacy in the cognitive aspect of money and transactions and how to plan and manage money for the future.



Figure 1. Field Observation

After analyzing the questionnaire distributed to students, the researcher conducted interviews with two students in the top average group and three in the average bottom group based on the questionnaire results. The interview questions were conducted to analyze their financial habits, their perspectives on money and income, and the financial products and services they used, whether they used them alone or accompanied by their parents. Most students receive a daily allowance from their parents and spend it all at once. Sometimes, students save their money to buy something they want. Students can understand that by working, they can earn money, but they do not have strong motivation and urgency to have a job yet. Students can carry out buying and selling transactions, but some have difficulty calculating the remaining money they have used. Students are also not entrusted by their parents to have a savings account or debit card. Each amount of their money is still supervised by parents; therefore, students cannot make significant financial decisions by themselves. If, in the short-term, students are still very dependent on their parents, inevitably, students do not have long-term financial planning for their future (Bonang, 2019; Susanti & Ardyan, 2018; Watermeyer et al., 2021).

The results of interviews with these students were supported by interviews conducted with parents to analyze how their financial habits are formed, the role of parents in introducing financial literacy to students, and parents' expectations of financial literacy competencies needed to help them in the future. Researchers interviewed three parents whose children have autism with diagnoses made when the children were under five years old. These parents entrust their children with a sum of money each day to be spent on food or public transportation. Some parents also intend to bring their children to the bank to open an account because they are over 18 years old. They also plan to teach their children how to use electronic payment systems to make it easier for them to track their children's money. Parents

do not teach their children to owe money to their friends because they want to minimalize the consequences that may appear because of debt. These parents expect their children to be able to use money more wisely, and they also hope that these children understand the importance of having income to have a sustainable life. These interview results showed that there was also a need for financial literacy in affective and psychomotor aspects related to the use of products and services of banking and transactions, and also how to make personal and long-term financial planning that they can follow once they earn their own money.

Furthermore, to be more effective in empowering youth with intellectual disabilities with this knowledge and skills, we need to involve their support system in learning financial literacy (Hidajat, 2016; Laily, 2016; Yushita, 2017). Parents and other family members should contribute to developing awareness and experience of financial services and products since early childhood, supported by specific education programs within schools. Those people around youth with intellectual disabilities are the core support system that can help them to learn about this vital matter of financial literacy (Kirby, 2017; Novieningtyas, 2018; Saraswati & Nugroho, 2021; Singh et al., 2020). Therefore, the competencies of financial literacy will enable not only youth with intellectual disabilities but also their support systems to customize their financial vision as a progressive realization to achieve a sustainable life in the future.

4. CONCLUSION

In conclusion, there is a need for financial literacy competencies for youth with intellectual disabilities, as the results of the questionnaire and interviews show. It means that youth with intellectual disabilities, such as autism, down syndrome, speech delay, and sensory integration, are the population who urgently need to be taught about knowledge and skills of financial literacy. These youths need to understand the financial literacy related to money, income, payment and purchase, price, financial records, foreign currency, financial planning, managing income and spending, saving, long-term planning, and credit. Parents and teachers at school also play a vital role in introducing these topics to youth with intellectual disabilities.

As they are in the transition phase from teenager to young adult, students must be entrusted with managing their own money and making their long-term financial planning to achieve an independent and sustainable life. The proposed recommendation is to cater to the needs of financial literacy competencies for youth with intellectual disabilities based on their needs while working closely with parents, teachers, and experts. In future research, it is necessary to design and develop financial curriculum literacy for these youths with intellectual disabilities to be equipped with essential knowledge and skills to achieve independent and sustainable lives in the future.

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