Economic Literacy and Economic Decisions

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ABSTRACT

This study investigates the current conditions of Economics teachers in relation to their skills of decision making in several economic aspects to find out whether economic literacy skill level impacts an ability of economic decision making. This study employed a descriptive method to 80 Economics teachers in 30 schools and administered descriptive statistical techniques as well as cross tabulation. The results of this study showed that generally the Economics teachers were categorized economically literate. In addition, it has also been proven that their literacy influenced their ability of such decision making as asset management, debt, saving, protection, and budgeting aspects. This indicates that for one to make economic rational decisions, they require good economic literacy.

Keywords: Economic literacy, economic decisions, economical aspects

INTRODUCTION

Economics brings people to act rationally because all humans are basically rational economic creatures. Understanding of economic aspects is obtained by humans through formal economic education and from life experience. Character values in economic activities are developed from the socio-cultural values that develop in Indonesia [1]. Economic education brings everyone to economic literacy to achieve prosperity; therefore, economic literacy is considered as crucial so it becomes an important discussion subject to the importance of literacy and encourages economic education as a way to increase economic literacy [2], [3].
Some of the results of the study in general say the need for further studies to strengthen understanding of economic aspects because it is believed that people who know the economy well must be more successful in economic life and manage their investments effectively. This condition explains that there may be a link between one's wealth and the level of understanding of the economy. Economic literacy is not enough just to be economic literate but to be successful in economic life must be accompanied by always reading, trying, or always learning. It was further disclosed that increasing economic awareness in society enables them to make rational choices and helps them not to make systematic inaccurate decisions [2], [3].

The importance of economic literacy breeds the awareness that rational economic life does not just emerge but through an educational process. Economic education is considered important to foster economic literacy both among students and educators as part of community members. In Germany and internationally, students' economic competencies are shaped and measured in economic education [4]. The importance of economic literacy also led the Canadian government to develop training strategies to increase economic literacy in the community and in Australia it was deemed necessary for financial education [5].

The 70-year long process that has been undertaken by the United States Council of Economic Education (CEE) Mission reinforces the need for economic literacy in one's life. The Council for Economic Education has played a role in increasing public economic knowledge through surveys in the form of economic literacy tests with participants from several countries.

In reality, the level of economic literacy is allegedly still low, including in Indonesia [6]. The results of a survey conducted by the Federal Reserve Bank of Minneapolis with adult samples obtained an average of 45 percent scores, which showed that there were major deficiencies in public understanding of basic economics, as well as surveys through on-line economic literacy tests by CEE, participants' economic literacy scores an average score of 75%, as table 1 shows.

| Table 1. Score for economic literacy tests (CEE, 2019) |
|-----------------------------------------------------|
| Economic Literacy Test Results from 03/26/2013 to 03/09/2019 |
| Total Participants: 199,365 |
| Average Score: 15 out of 20 for a 75% |
| Average Age: 24 |
| Gender: Females - 98,526|
| Males - 100,375 |
| Education Level: Grade School - 12,585 |
| High School - 104,100 |
| 1-2 years of college - 26,436 |
| 4 years of college - 26,558 |
| Graduate School - 29,474 |
| Employment Status: Employed - 103,308 |
| Unemployed - 95,760 |
The level of economic literacy of the community must be increased, because the level of economic literacy will reflect the economic life that effectively brings prosperity to the people. In principle, economic literacy is a tool to achieve goals, it is just that in reality not everyone has high economic literacy so that pursuing opportunities for prosperity [7].

As a survey of economic literacy levels conducted on 80 secondary school economic teachers in the city of Bandung shows only 60% of respondents whose economic literacy is classified as high criteria. Likewise, with financial literacy, the level of financial literacy in Indonesia according to the World Bank is still very low at around 20 percent, while neighboring countries such as the Philippines have reached 27 percent, Malaysia 66 percent, Thailand 73 percent and Singapore 98 percent.

A teacher is a figure for his students, even in the community the teacher is often positioned as a figure that must be emulated, including in economic life as one of the economic actors in the community. An economic literate should be rational and effective in managing various aspects of economic life. Research conducted by Varum [8] said, that although the factors that influence economic literacy are studied, economic literacy is thought to influence other variables, thus making it an explanatory variable.

This paper tries to answer whether the level of economic literacy can explain decision making related to aspects of economic life such as asset management, savings, managing debt, self-protection and management of expenditure. This is because the low level of literacy will have an impact on the accuracy of decision making, and may lead people to make wrong decisions, inappropriate investment decisions, conditions for spending that are greater than income, lack of interest in saving and even tend to be consumptive.

Conditions like the above must not be allowed to drag on, because it will have a further impact on the level of welfare of society in general. If it turns out that the level of economic literacy is the solution to these problems, then there should be an effort to increase the understanding of the economic community. Economic literacy will increase individual competence, especially related to the ability to make decisions about various choices or economic problems faced throughout their lives, such as understanding and making decisions about the effect of inflation on exchange rates, how to make the right investment [9].

If we look closely, the condition of the low level of economic literacy is feared to affect irrational behavior and decision making. This study seeks to analyze how the relationship between the level of economic literacy of secondary school economic teachers in the city of Bandung with decision making related to aspects of wealth, debt, savings, spending and financial protection.

LITERATURE REVIEW

In the current era of economic globalization, consumer behavior is faced with conditions that are very different from before, the problems caused are very many, because on one side each individual is faced with a variety of choices that are very complex and very spoiled consumers, but on the other hand encourage individuals to be irrational. Economic literacy is an important factor that helps individuals in
making rational economic decisions [10].

Making someone rational means that the individual must increase economic understanding, because economics is seen as an integral part of people's lives and understanding of the economy is very important in helping everyone make decisions that lead to a more meaningful and prosperous future. This understanding of economics is called economic literacy. Economic literacy is considered as the type of knowledge needed to master a certain set of tasks related to economic matters, such as paying bills, issuing checks, or understanding the balance sheet [11], [12]. On a broader scale, economic literacy is seen as a basic idea in the economy that every literate culture should know [11].

Economic literacy illustrates the level of basic understanding that enables people to understand everyday economic events and explains the causes and relationships of various aspects in solving economic problems in their lives, not talking about academic issues about economics. The North Central Regional Educational Laboratory added that the level of economic literacy determines the ability of individuals to interpret economic problems, evaluate possible alternative solutions, calculate costs and benefits, and observe the economic cycle situation.

Rational individuals can make decisions that are accurate, full of calculations and considerations whether the decision is profitable or not, right or not, even further questions the external impact of the decision. This condition is explained by rational choice theory that assumes every consumer has a good preference for his every need, so that he will allocate income appropriately for each of his economic decisions, not spend income emotionally following the passions [13].

The rationality of individuals in various economic measures indicates that the person has been economically literate, so it is said that economic literacy is a useful tool to open closed perceptions due to lack of knowledge about economic costs or benefits. In the 2006 EFA Global Monitoring Report conducted research in several developing countries with the aim to determine the extent to which increased economic literacy can provide benefits or economic prosperity in human life reported that economic literacy is needed by all people in the world.

The results of this study indicate that high economic capability and knowledge will improve a country's economy both micro and macro. Micro will improve the economy of the population / household and macro can improve the economy of a country as a whole. For this reason, it is recommended that every country that wants to prosper must increase the economic literacy of its population so that the country's productivity is optimal and efficient [9].

Gerek and Kurt emphasize that economic literacy is very important because it helps to understand the world of economics, directing people to be more rational [14]. Literacy is also useful for understanding fiscal policy constraints and their potential, which have both individual and social impacts. The social impact of economic literacy also has tremendous importance, a low level of economic literacy can cause a person to make wrong decisions and reduce economic efficiency and further these problems can affect the whole country and even the world due to
globalization. Furthermore, government economic policies can influence individual economic decisions or vice versa [15], [16].

The above explanation has the consequence of the need to increase economic awareness in the community and even must be instilled early, so that later can make individuals can make systematic rational choices or not make inaccurate decisions [17]. The economic condition of the community will be better, because economic literacy is a set of knowledge and competencies that enables the improvement of personal and social decisions about various economic problems faced in daily life, both as consumers, vendors, producers, investors, workers or voters.

An important component of economic literacy is the aspect of knowledge including financial aspects or financial literacy. Financial literacy is part of economic literacy, which is interpreted as an understanding of a series of economic concepts that can be used to evaluate financial situations and make good financial decisions [18]. In the economic context, literacy is more emphasizing aspects of determining daily economic decision making, and this is the main study of economics that touches on the economic aspects of human daily activities. The operation of the multiplier effect engine of economic literacy, the impact of economic literacy pervades all lines and all other social aspects.

If everyone has been economically literate, then there will not be found any more cases that ensnare the community to fall into the ravages that destroy their lives. In terms of economic value, economic literacy including financial literacy helps contemporary people understand and make more informed decisions that will shape the future in which they live [6]. Nothing is more important than economics, the happiness of some people is often measured from the economic life so it is not surprising that in the community life rankings are classified as high, middle and low economic groups. Other aspects of life are always related to economic problems.

Economics is positioned as a very important aspect of human life; human rationality becomes so important. Rational and correct decisions of individuals depend on awareness, especially economic awareness and reflection of the individual. Preference theory in economics emphasizes how economic preferences and decisions affect the economic behavior of individuals and society, which at the end is having the skills needed in basic economic skills [3].

The picture of the level of economic literacy among economics teachers in the city of Bandung Indonesia has not yet reached an ideal score should be a concern, because teachers are figures who become a reference and role model for their students even by the community. The level of economic literacy of a person will affect economic decisions, especially influencing the ability to better manage assets, debt, savings, self-protection and management of other financial aspects [19].

To create crystallized values and prosperity in intelligent behavior can be done with economic literacy. Economic literacy also influences how to encourage individual sensitivity in how to increase intelligent choice of pol. This is intended so that each individual understands how to analyze various laternatif when making a decision, so as not to make a wrong decision.
RESEARCH METHOD
The research method used was descriptive research method through surveys. The object of the study was economic literacy, and the subject of the study was economics teachers in senior high schools in Bandung, Indonesia.

The population in this study was all economics teachers of high schools in Bandung as many as 130 teachers from 52 schools with a sample of 80 teachers from 30 schools through random sampling and proportional random sampling.

The instrument used consisted of tests and questionnaires regarding economic literacy. Data were analyzed using descriptive statistics, while the general description of the economic literacy level of teachers using the calculation of frequency, percentage and cross tabs and t test.

RESULTS AND DISCUSSION
The teachers’ economic literacy level was obtained from a test called the Test of Economic Literacy (TEL) developed by the National Council for Economic Education (NCEE), Indonesia, containing 20 questions. The level of economic literacy of teachers was categorized into three categories namely economic literacy with high, medium and low categories. The high category if the teacher gets a score of $\geq 15$, the medium category scores 11 to 14 and the low category scores $\leq 10$, as shown in table 2.

Data on the economic literacy level of economics teachers in public high schools in Bandung based on literacy tests covering 20 economic categories developed by CEE can be seen in Figure 1.

Figure 1. Overview of Economic Literacy by category

Source: Research results
Figure 1 shows the economic literacy picture of the economics teacher, the most widely understood aspect is the matter of the level of prices for goods and aspects of saving trends. The questions that the teachers were least able to answer were aspects of the impact of government policies, and aspects of the benefits of international trade. Overall literacy level scores from the 20 literacy test questions are shown in Table 2. Only 60% of teachers have economic literacy levels with high criteria, and 8.8% on low criteria. The economics teacher is a teacher in the social science group. This finding is in line with Budiwati's research [5], that the literacy level of economics teachers in the social sciences is slightly lower than those in the natural sciences teachers.

| Criteria | Frequency (people) | Percentage (%) |
|----------|-------------------|---------------|
| High     | 48                | 60.0          |
| Middle   | 25                | 31.2          |
| Low      | 7                 | 8.8           |
| Total    | 80                | 100           |

The level of economic literacy is reflected in a person's economic behavior. How is the description of economic behavior viewed from aspects of assets, debt, protection, savings and expenditure associated with the level of economic literacy in the analysis through cross tabulation of these aspects. As explained by Sina [19] that important indicators of economic literacy must be crystallized in everyday behavior to achieve prosperity seen by several aspects, namely aspects of assets, debt, protection, saving and spending. Economic preferences and decisions affect humans as consumers, producers, investors, savers, and voters. For this reason, every member of the community must have a certain level of economic knowledge, skills and understanding [3].

| Assets | do not have assets | Count | % of Total | High | Middle | Low | Total |
|--------|--------------------|-------|------------|------|--------|-----|-------|
| Have assets | Count | 30   | 16.6% | 20% | 11.3% | 6.3% | 48.0% |
| Total   | Count | 48   | 60.0% | 31.3% | 8.8% | 100.0% |

The high level of economic literacy is seen from the aspect of assets, most economics teachers in the city of Bandung already have it and the most preferred type of financial product is a debit card. This condition shows the awareness of the importance of buying and owning productive assets for the guarantee of life in the future. This condition reflects the cognitive abilities possessed, and this is a factor that determines investment decision making [20]. Table 4 shows the types of assets chosen by respondents.
Table 4. Crosstab Economic Literacy and Selected Assets

| JK    | LE   | High % | Middle % | Low % | Total % |
|-------|------|--------|----------|-------|---------|
| Stock | 4,8  | 3,2    | 0        | 7,9   |
| Debit Card | 23,8 | 11,1   | 1,6      | 36,5  |
| Pension fund | 12,7 | 12,7   | 4,8      | 30,2  |
| Deposit | 12,7 | 7,9    | 3,2      | 23,8  |
| Mutual fund | 0    | 0      | 1,6      | 1,6   |
| Total  | 54,0 | 34,9   | 11,1     | 100   |

Debt Aspects

Tabel 5. Debt and Economic Literacy Crosstabulation

| Debt                        | Economic Literacy | Total |
|-----------------------------|-------------------|-------|
|                             | High             | Middle| Low  | %     |
| No have Debt               | 19               | 11    | 5    | 35    |
| % of Total                 | 23.8%            | 13.8% | 6.3% | 43.8% |
| Have Debt                  | 29               | 14    | 2    | 45    |
| % of Total                 | 36.3%            | 17.5% | 2.5% | 56.3% |
| Total                      | 48               | 25    | 7    | 80    |
| % of Total                 | 60.0%            | 31.3% | 8.8% | 100.0%|

Viewed from the aspect of debt, it appears that the economics teacher in the city of Bandung has a debt to open a business with a payroll deduction process so that the loan effort is used as capital to run the business (table 6) A high level of economic literacy must be characterized by the ability to manage debt with the ability to make the right financial plan. If not, there will be an error in managing debt which results in excess debt so that income will be used up to pay off debt. Indeed there is a link between economic literacy and financial literacy with debt [7], [21].

Table 6. Crosstab Economic Literacy and Debt Management

| JK    | LE   | High % | Medium % | Low % | Total % |
|-------|------|--------|----------|-------|---------|
| Effort       | 20,0 | 15,6   | 4,4      | 40,0  |
| Other        | 17,8 | 6,7    | 4,4      | 28,9  |
| Needs        | 11,1 | 4,4    | 0        | 15,6  |
| Home         | 6,7  | 2,2    | 6,7      | 15,6  |
| Total        | 55,6 | 28,9   | 15,6     | 100   |

Protection Aspects

Tabel 7. Protection * Economic Literacy Crosstabulation

| Protection    | Economic Literacy | Total |
|---------------|-------------------|-------|
| No have protection | Count 21 | 12    | 5    | 38     |
| % of Total    | 26.3%            | 15.0% | 6.3% | 47.5%  |
| Have protection | Count 27 | 13    | 2    | 42     |
| % of Total    | 33.8%            | 16.3% | 2.5% | 52.5%  |
| Total         | Count 48         | 25    | 7    | 80     |
| % of Total    | 60.0%            | 31.3% | 8.8% | 100.0% |
The high level of economic literacy is also seen from the aspect of protection, namely knowledge and awareness to be able to protect themselves and assets affect the uncertainty faced in taking risks by becoming insurance customers. Table 7 explains that most respondents have self and family protection. Warsono [22] argues that economic knowledge is primarily related to finance, individuals will always guard against the risk of life in the event of a breadwinner in death or permanent disability so that they cannot work before the dependents can live independently. The form of protection chosen by respondents is shown in Table 8.

### Table 8. Crosstab Economic Literacy and Protection Management Aspects

| JK                     | LE | Tinggi | Middle | Rendah | Total |
|------------------------|----|--------|--------|--------|-------|
| Life Insurance         | 14,0 | 12,0 | 2,0 | 28,0 |
| Business Insurance     | 0 | 2,0 | 2,0 | 4,0 |
| Health Insurance       | 24,0 | 10,0 | 6,0 | 40,0 |
| Vehicle Insurance      | 10,0 | 2,0 | 2,0 | 14,0 |
| Education Insurance    | 6,0 | 2,0 | 0 | 8,0 |
| General Insurance      | 2,0 | 2,0 | 0 | 4,0 |
| Credit Insurance       | 0 | 0 | 2,0 | 2,0 |
| **Total**              | 56,00 | 30,00 | 14,00 | 100 |

### Saving Aspects
High level of economic literacy makes people literate about saving. This is as revealed [23] that economic literacy will be positively related to saving intentions because individuals or families do not want to try to save due to lack of economic knowledge. Savings will not be optimal if the level of economic literacy is low, besides the implications for low savings but also the level of welfare will be low. The types of savings chosen by respondents mostly choose conventional savings compared to the types of sharia savings. This reflects the condition that sharia savings in Indonesia have not yet become the main choice of Indonesian society, even though the majority of the population is Muslim. This is certainly related to the level of public trust and confidence in sharia savings.

### Table 9. Conventional Savings * Economic Literacy Crosstabulation

| Economic Literacy | High | Middle | Low | Total |
|-------------------|------|--------|-----|-------|
| Conventional Savings |     |        |     |       |
| No have Conventional Savings | Count | 0 | 4 | 1 | 5 |
| % of Total         | 0.0% | 5.0% | 1.3% | 6.3% |
| Have Conventional Savings | Count | 48 | 21 | 6 | 75 |
| % of Total         | 60.0% | 26.3% | 7.5% | 93.8% |
| Total              | 48 | 25 | 7 | 80 |
| % of Total         | 60.0% | 31.3% | 8.8% | 100.0% |

### Table 10. Sharia Savings * Economic Literacy Crosstabulation

| Economic Literacy | High | Middle | Low | Total |
|-------------------|------|--------|-----|-------|
| Sharia Savings    |     |        |     |       |
| No have Sharia Savings | Count | 35 | 22 | 5 | 62 |
| % of Total        | 43.8% | 27.5% | 6.3% | 77.5% |
| Have Sharia Savings | Count | 13 | 3 | 2 | 18 |
| % of Total        | 16.3% | 3.8% | 2.5% | 22.5% |
| Total             | 48 | 25 | 7 | 80 |
| % of Total        | 60.0% | 31.3% | 8.8% | 100.0% |
Expenditure Aspect

The final aspect of the level of economic literacy is the ability to reduce spending. Table 11 explains that most respondents have expenditure budgets. Managing monthly routine expenses is important for overall financial planning. Optimization of limited financial resources is needed so that each expenditure is an effective and efficient expenditure. Financial management is needed so that the available financial resources are sufficient to meet the needs because management can help determine the use of limited resources for needs that are prioritized and agreed upon by all family members. Karvof [24] revealed that shopping was according to ability and need.

A description of how the teacher manages expenditure is always within budget or not shown in table 12.

| Tabel 11. Expenditure Budget* Economic Literacy Crosstabulation |
|---------------------------------------------------------------|
| Expenditure Budget | Economic Literacy | Total |
| No have Expenditure Budget | High | 22 | 27.5% |
| | Middle | 10 | 12.5% |
| | Low | 4 | 5.0% |
| | % of Total | 45.0% |
| Have Expenditure Budget | High | 26 | 32.5% |
| | Middle | 15 | 18.8% |
| | Low | 3 | 3.8% |
| | % of Total | 55.0% |
| Total | Count | 48 | 60.0% |
| | % of Total | 31.3% |
| | % of Total | 8.8% |
| | % of Total | 100.0% |

| Tabel 12. Crosstab of Economic Literacy and Outcome Budget Suitability |
|---------------------------------------------------------------|
| JK | LE | High | Middle | Low | Total |
|---|---|---|---|---|---|
| Suitable | 18.6% | 18.6% | 7.0% | 44.2% |
| Sometimes suitable | 27.9% | 11.6% | 7.0% | 46.5% |
| Not suitable | 7.0% | 0 | 2.3% | 9.3% |
| Total | 53.5% | 30.2% | 16.3% | 100%

The relationship between the level of economic literacy with decision making on several aspects of the economy seen from the data above has reflected the correct decision making of the respondents. As said that economic literacy brings someone smart in decision making related to various aspects of economic life, such as saving, asset management, debt management, investing and other economic aspects, so that they can make economic decisions accurately and rationally, and help in solving the problems of their daily lives [3], [8]. Several studies strengthen the discussion about the importance of economic literacy [3], [7]. Economic literacy will help citizens to act rationally [25], so that being a literate person makes it easier for them to become successful people in decision making in economic life as a form of a literate behavior.

CONCLUSION

The economic literacy level of economics teachers of high schools in Bandung, Indonesia, are quite good, meaning that they are already economically literate even though the title “literate economists” is not suitably attached to them yet.

High and low levels of literacy will be seen in individual economic behavior, namely from the ability to make decisions related to several aspects of the economy in society. The ability of economic decision making is
directly proportional to the purpose of economic understanding, namely welfare. Rationality in making decisions becomes the target of economic literacy that guides individuals to achieve welfare, because in essence welfare is always measured by economic indicators.

The economic level of economic conditions of secondary school teachers in Bandung is seen in the management of assets (debit cards), debt (business needs), protection (health insurance), savings (BJB Bank in conventional banks and Bank Mandiri in Islamic banks) and expenditure budgets. In fact, the economics teachers in the city of Bandung can make the right decisions on aspects of assets, debt, savings protection and expenditure budgets. The accuracy of decision making reflects an adequate understanding of the economy or economic literacy.

REFERENCES
[1] F. Amri, E. T. Djatmika, H. Wahyono, and S. U. M. Widjaja, “Pengembangan Sintaks Simulasi dalam Pembelajaran Ekonomi Berorientasi pada Pendidikan Karakter,” J. Pendidik. Ilmu Sos., vol. 28, no. 1, p. 61, 2019, doi: 10.17509/jpis.v28i1.14368.
[2] M. K. Salemi, “Teaching Economic Literacy: Why, What and How,” Int. Rev. Econ. Educ., vol. 4, no. 2, pp. 46–57, 2005, doi: 10.1016/S1477-3880(15)30132-8.
[3] S. Dilek, “Economic Approach to Consumption in the Process of Global Crisis: 2007–2009 Period,” in Managerial Issues in Finance and Banking, vol. 9783319013, no. October 2014, Cham: Springer International Publishing, 2014, pp. 77–86.
[4] C. Schnell and D. Loerwald, “Interest as an influencing factor on student achievement in Economics: Evidence from a Study in Secondary Schools in Germany,” Int. Rev. Econ. Educ., vol. 30, 2019, doi: 10.1016/j.iree.2018.03.005.
[5] L. Blue, P. Grootenboer, and M. Brimble, “Financial literacy education in the curriculum: Making the grade or missing the mark?,” Int. Rev. Econ. Educ., vol. 16, no. 9, pp. 51–62, May 2014, doi: 10.1016/j.iree.2014.07.005.
[6] N. Budiwati, “Analisis Literasi Ekonomi dan Perilaku Konsumen (Survey pada Guru SMA di Kota Bandung),” Universitas Pendidikan Indonesia, 2014.
[7] A. Lusardi and O. S. Mitchell, “The economic importance of financial literacy: Theory and evidence,” J. Econ. Lit., vol. 52, no. 1, pp. 5–44, 2014, doi: 10.1257/jel.52.1.5.
[8] C. Varum, E. Santos, and V. Afreixo, “Recent Trends and New Evidence in Economics Literacy Among Adults,” J. Econ. Educ. Res., vol. 15, no. 2, pp. 187–205, 2014.
[9] T. Jappelli, “Economic literacy: An international comparison,” Econ. J., vol. 120, no. 548, pp. 429–451, 2010, doi: 10.1111/j.1468-0297.2010.02397.x.
[10] G. YILDIRIM and C. Öztürk, “Ekonomi Okuryazarlığı ve Eğitimine İlişkin Alan Uzmanı ve Öğretmen Görüşlerinin Belirlenmesi,” Erciyes J. Educ., vol. 1, no. 2, pp. 1–22, 2017, doi: 10.32433/eje.362123.
[11] W. B. Wlstad and J. C. Soper, “Economic Literacy, Teacher Instruction, and Preparation for the World of Work,” World Assem. Int. Counc. Educ. Teach.,
1987, doi: 10.1017/CBO9781107415324.004.

[12] R. A. Ristau, “Developing Economic Literacy: A Challenge for Business Education,” Balanc. Sheet, vol. 66, pp. 13–18, 1985.

[13] R. H. Frank, Microeconomics and Behavior. New York: McGraw-Hill/Irwin, 2008.

[14] S. Gerek and A. Aşkım, “Bilgisayar ve Öğretim Teknolojileri Eğitimi Bölümlerinde Ekonomi Okuryazarlığına İlişkin Göstergeler * Economic Literacy Indicators at the Department of Computer Education & Instructional Technologies,” vol. 9, no. 1, pp. 87–97, 2010.

[15] K. Q. Hill and A. Hinton-Anderson, “Pathways of Representation: A Causal Analysis of Public Opinion-Policy Linkages,” Am. J. Pol. Sci., vol. 39, no. 4, p. 924, 1995, doi: 10.2307/2111663.

[16] B. I. Page and R. Y. Shapiro, “Effects of Public Opinion on Policy,” Am. Polit. Sci. Rev., vol. 77, no. 1, pp. 175-190., 1983.

[17] A. F. Cakmak, S. Benk, T. Budak, and R. Yucedogru, “A study on economic literacy levels of primary prospective teachers,” Int. J. Early Child. Learn., vol. 22, no. 2, 2015.

[18] M. F. Pang, “Boosting financial literacy: benefits from learning study,” Instr. Sci., vol. 38, no. 6, pp. 659–677, Nov. 2010, doi: 10.1007/s11251-009-9094-9.

[19] P. G. Sina, “Analisis Literasi Ekonomi,” J. Econ., vol. 8, no. 2, pp. 135–143, 2012, doi: 10.21831/economia.v8i2.1223.

[20] D. Christelis and L. I. Dobrescu, “The Impact of Social Activities on Cognitive Ageing: Evidence from Eleven European Countries,” SSRN Electron. J., 2012, doi: 10.2139/ssrn.2141386.

[21] J. Gathergood, “Self-control, financial literacy and consumer over-indebtedness,” J. Econ. Psychol., vol. 33, no. 3, pp. 590–602, Jun. 2012, doi: 10.1016/j.joep.2011.11.006.

[22] Warsono, “Prinsip-Prinsip Dan Praktik Keuangan Pribadi,” J. Salam J. Stud. Masy. Islam, vol. 13, no. 2, pp. 137–152, 2010, [Online]. Available: http://ejournal.umm.ac.id/index.php/salam/article/view/470.

[23] N. K. Y. Yunus, S. Ishak, and N. A. Jalili, “Economic Literacy amongst the Secondary School Teachers in Perak Malaysia,” vol. 27, no. 8, pp. 69–78, 2010.

[24] K. Anatoli, Kaya dengan CEPIL: Cara Cerdas Meraih Kekayaan dan Keberkatan Finansia. Jakarta: Gramedia, 2010.

[25] N. Mercana, V. Kahyab, and B. Alamurc, “A Research Regarding to the Relationship between Economic Literacy and Consumer Preferences in Knowledge Economy,” Eur. J. Res. Educ., vol. 2, no. 2, pp. 1–13, 2014.