Environment. Technology. Resources. Rezekne, Latvia
Proceedings of the 14th International Scientific and Practical Conference. Volume 2, 119-125

Students' Financial Literacy Knowledge Research: The Case of Kauno Kolegija Higher Education Institution

Gintarė Jurkševičiūtė
Department of Informatics
Faculty of Technologies
Kauno kolegija Higher Education Institution
Kaunas, Lithuania
gintare.jurkseviciute@go.kauko.lt

Vilma Morkūnienė
Department of Business
Faculty of Business
Kauno kolegija Higher Education Institution
Kaunas, Lithuania
vilma.morkuniene@go.kauko.lt

Aušra Žvironienė
Department of Informatics
Faculty of Technologies
Kauno kolegija Higher Education Institution
Kaunas, Lithuania
ausra.zvironiene@go.kauko.lt

Jovita Danielytė
Department of Informatics
Faculty of Technologies
Kauno kolegija Higher Education Institution
Kaunas, Lithuania
jovita.danielyte@go.kauko.lt

Abstract. **A person feels more confident and secure with good financial skills and knowledge in the face of increased inflation, energy crisis and geopolitical uncertainty. Therefore, financial literacy is one of the most important skills necessary for a modern person. The basics of financial literacy are included in the programs of primary and secondary schools in Lithuania. So, students of Higher Education Institutions should have basic financial literacy knowledge and skills. The purpose of this study is to assess student's level of financial literacy. For this reason, a survey of 1st year students of Kauno kolegija Higher Education Institution Technologies and Business Faculties was carried out in May – June of 2022. The survey consisted of questions and knowledge test tasks which were divided into four groups: budget, credits and debts, savings and investments, financial responsibility. The collected data were processed using the SPSS 29 software. It was assessed that the level of financial literacy of Kauno kolegija Higher Education Institution students is adequate. The quartile width of the financial literacy index of all respondents was about half of the total spread. That means that the spread of values between the quartiles is similar. It was observed that earning respondents are more tend to save than non-earning respondents when evaluating the differences in the context of saving habits. In addition, two-thirds of working students cut back on spending when money is tight. It was observed that the vast majority of working students do not tend to borrow from family or friends. A statistically reliable difference was obtained between the groups of working and non-working respondents when evaluating an investment, i.e. one third of working people tend to invest. Respondents named the main reasons for not investing: lack of knowledge and insufficient amount of money. Respondents who invest their savings usually choose to invest in cryptocurrencies, real estate, investment funds or their own business. Even four-fifths of unemployed students said that they wanted to learn more about money management when assessing their financial skills. The study found out that goal setting has a direct impact on reducing their expenses. In addition, a better financial situation makes it possible to regularly save and evaluate the financial situation before buying an expensive item. What is more, the ability to manage your finances directly depends on deepening your financial knowledge, encouraging you to compare prices when buying something, compare the conditions of different credit institutions. The received results show that the majority of Kauno kolegija Higher Education Institution students have a sufficient amount of general financial literacy knowledge, for example, they tend to plan their personal budget, borrow efficiently,**

Print ISSN 1691-5402
Online ISSN 2256-070X
https://doi.org/10.17770/etr2023vol2.7266

correctly assess investment risks, inflation and interest rates, and have long-term financial goals.

Keywords: budget, credits, investments, students' financial literacy.

I. INTRODUCTION

In everyday life people are constantly facing decisions about their personal finances: how to manage their household budget, for which purchases to borrow and for which to save, whether to invest, which investment instruments to choose, how to avoid falling into scams and how to choose a better way to save for the future.

A person with sufficient financial knowledge can better understand financial information and make decisions not only about everyday consumption but also about saving, investing, credit, pensions, life insurance, etc. This leads to better financial behavior. Financial knowledge can help them to assess their current financial situation more objectively and help them to avoid financial problems [1].

An analysis of financial literacy studies [2], [3], [4], [5], [6], [7], [8], [9] which were made around the world showed that people have a low level of financial literacy in most countries (except for countries such as Australia, Canada and Denmark where are considered to have higher financial literacy level).

Most financial literacy surveys conducted in Lithuania showed that Lithuanian residents are also characterized by low financial literacy [10], [11]. Residents are not tending to plan their personal budgets and save for the future. This can lead to over-indebtedness. And it can become a burden for households and threatens the stability of public finances [12]. Though the results of these studies have been disappointing it has been improving in recent years [13].

The low level of financial literacy has led to its inclusion in the list of key skills needed by modern people and has become a priority in EU education in the 21st century. This has created a need for additional financial education in schools. One of the reasons why financial literacy is so important for children is that financial attitudes, habits and norms start to form between the ages of 6 and 12. It can have a long-term effect to teach children about money and their spending habits at this age [14].

In Lithuania, financial literacy is included in primary and secondary school curricula. So young people (as well as higher education students) should have basics of financial literacy knowledge and skills.

The financial literacy skills which are acquired at school are also important for students. Because they must balance their expenses, rent a house, get an education and secure a good future income. Today, they are living in an incredibly challenging economic situation. What is more, they will ultimately be responsible for their own financial well-being in such an economic situation. So, students need to develop the skills which will help them make their own choices among the many career and learning options available to them. What is more, they need to be able to manage their own incomes whether it's pocket money from their parents or a part-time job.

Lithuania has only episodic financial literacy assessments of schoolchildren, young or elderly people. Therefore, it is difficult to know what the level of financial literacy is, what determines it and what is the most important factor influencing the achievement of higher or lower levels of financial literacy.

The object of the research is the financial literacy knowledge of students at Kauno kolegija Higher Education Institution.

The aim of this study is to assess the level of financial literacy of students in Kauno kolegija Higher Education Institution.

The research objectives:

- To provide a theoretical underpinning for the study, distinguishing dimensions of budget; credits and debts; savings and investments; financial responsibility.
- To provide an analysis of the results of the research, highlighting the level of financial literacy of students.

The method of questionnaire survey was chosen for the research, SPSS (Statistical Package for Social Science) version 29.0 software was used for data processing, the obtained results are presented in figures and described in the text.

II. MATERIAL AND METHODS

The knowledge and understanding of financial concepts and risks, as well as the skills and attitudes to apply this knowledge and understanding in order to make effective decisions in a variety of financial situations, to improve the financial well-being of individuals and society, and to enable them to participate in economic life is known as financial literacy [2], [4], [13]. In other words, financial literacy is the ability to understand and effectively use a range of financial skills including personal financial management, budgeting, investing and taking financial responsibility.

A lack of financial literacy knowledge can lead to a number of problems, such as accumulating debts due to poor spending decisions or decisions not to save. This can lead to poor credit conditions, bankruptcy, foreclosure or other negative consequences. The failure to adapt to today's changes leads to social exclusion and poverty [15], [16]. High-quality financial education can help overcome this.

One of the instruments that can measure and assess the level of financial literacy is the financial literacy index. The Lithuanian financial literacy index was calculated for the first time in 2019. The survey questionnaire and the methodology for calculating the index were developed by researchers from Vilnius Gediminas Technical University (Vilnius Tech) [10]. The biennial survey asked people to answer questions related to saving, investing, personal finance management, retirement and financial and economic phenomena. The financial literacy index stood at 43 out of a possible 100 points in 2019 and it was 45 out of a possible 100 points in 2021 [11].

In order to assess the knowledge of financial literacy of Kauno kolegija Higher Education Institution 1st year students, a questionnaire was designed. A questionnaire covered four dimensions: budget; credits and debts; savings and investments; financial responsibility.

It analyzed the questionnaires used by other Lithuanian [17], [18] and foreign [2], [19], [20], [21], [22] authors or organizations such as the Free Market Institute of Lithuania, Swedbank, the OECD and the World and the Americas region's platforms for assessing and learning about financial knowledge before developing the questionnaire. Then the selected questions were adapted (considering the economic situation in Lithuania) to test the financial literacy knowledge of Kauno kolegija Higher Education Institution students.

The following principles were followed in the selection of questions [16]:

- Simplicity: questions are assessing knowledge of the essential elements of decision-making in the current era;
- Relevance: the questions are related to the concepts linked to people's everyday financial decisions throughout their life cycle;
- Brevity: the number of questions should be limited;
- Differentiation: questions are grouped by area.

The questionnaire consists of 57 questions: 12 general questions and 45 financial literacy questions divided into four groups:

- Budget (9 questions);
- Credits and Debts (6 questions);
- Savings and Investments (14 questions),
- Financial responsibility (16 questions).

The questions are grouped according to the financial literacy groups (Fig. 1).

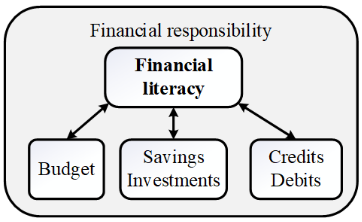

Fig. 1. Financial literacy model.

A targeted anonymous survey was carried out between May and June of 2022. 219 respondents of 1st year students of Kauno kolegija Higher Education Institution Faculty of Technology and Faculty of Business were interviewed. There are 54.3 % of men and 45.7 % of women of these respondents. Respondents' distribution across study programs and faculties is shown in Fig. 2.

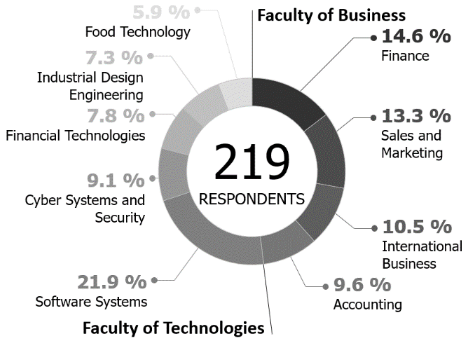

Fig. 2. Respondents distribution across study programs.

Respondents were briefly informed about the objectives of the research before they take the survey and completed the paper or electronic survey.

SPSS 29 and MS Excel were used for the statistical analysis of the survey data.

Each correct answer in the questionnaire (designed to test knowledge) was given a score of 2 and an incorrect answer was given a score of 0 to calculate the financial literacy index. Accordingly, a partially correct answer was scored from 0.5 to 1.5 points depending on the number of partially correct answers in the question. The maximum score that could be obtained by answering all the questions correctly was 83 points: budget – 13, credits and debts – 12, savings and investments – 26, financial responsibility – 32.

Numerical characteristics (mean, median and quartiles) were used to measure the financial literacy index. Numerical characteristics showed how the values of the financial literacy index are distributed across all survey participants.

III. Results and Discussion

The results of the anonymous surveys were analyzed from different perspectives in order to identify the assessments and interrelationships between the different groups of financial literacy.

When it was assessed respondents' financial situation 64.4 % of respondents answered that their expenses do not exceed their income and 59.4 % of them plan their income (from which even 27.4 % have a 6-month plan for their income and expenses). 74.4 % of respondents reduce expenditure when they run out of money. Respondents try not to borrow (78.8 %) but if they do borrow, they do it responsibly (98.2 % of respondents are assessing the terms of the loan). 62.1 % of respondents have emergency savings. 65.8 % of respondents are planning to invest in the future in cryptocurrencies, real estate, their own business, investment funds, precious metals and currencies. While those respondents who do not invest refer to a lack of financial knowledge as one of the reasons (Fig. 3).

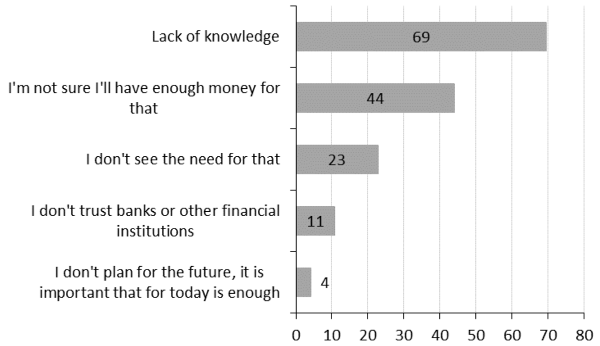

Fig. 3. Reasons for respondents' non-investment.

69.9 % of respondents set long-term goals responsibly, follow a budget plan, save regularly, compare prices when buying something, work extra hours to cover expenses, pay their taxes on time and improve their financial knowledge.

Thus, it can be stated that the vast majority of Kauno kolegija Higher Education Institution respondents have the right habits of personal finance management, tend to know how to plan a personal budget, borrow responsibly and correctly assess investment risks.

Financial responsibility. When it was assessed respondents' financial responsibility, it was observed that the most common ways to get money were borrowing from parents or friends ($r = 0.351, p < 0.01$) and taking money from savings ($r = 0.189$, $p < 0.01$). The better financial situation makes it easier to save regularly ($r = 0.207, p < 0.01$) and to take a look at one's financial situation before buying an expensive item ($r = 0.189$, $p < 0.01$).

Savings and investments. When it examed respondents' savings and investment behavior, 23.3 % of those who believe that they need to have 4-6 months of income in reserve would sell an item if they ran out of money (versus 9.8 % of those who believe they need to have 3 months in reserve, $p = 0.027$). 26.3 % of respondents who has 4-6 months' income for a "rainy day" think that they will have too little money to invest (versus 65 % with 3 months' income in reserve, $p = 0.015$). 91.7 % of respondents (with 4-6 months of income in reserve) believe that if they could invest, they would invest in different financial products which would guarantee their financial security (versus 76.8 % of respondents whose financial situation is uncertain, $p = 0.02$) (Fig. 4.).

Credits and debts. The most common ways of borrowing money are to borrow from family or friends ($r = 0.304, p < 0.01$), take from savings ($r = 0.205, p < 0.01$), take credit or consumer loan ($r = 0.153, p < 0.05$) or use an existing credit card ($r = 0.209, p < 0.01$).

Budget. If women have remaining money, 44 % of them sometimes plan their budget and future expenses (versus 24.4 % of men, $p = 0.005$). When respondents run out of money: even 63 % of women take it from savings (versus 39.5 % of men, $p = 0.001$); 83 % of women reduce spending money (versus 67.2 % of men, $p = 0.008$), sell an item (24 % of women, versus 9.2 % of men) and 32 % of women borrow money from family or friends (versus 19.3 % of men, $p = 0.031$). Also, women are more likely than men to feel responsible for repaying the loan if the person they have guaranteed, fail to meet commitments (77 % of women agree versus 61.3 of men, $p = 0.013$). 84 % of women are more likely to tend not to invest (versus 62.2 % of men, $p < 0.001$). And even 95 % of women prefer to keep their savings in an account or at home in cash (versus 84.9 % of men, $p = 0.0015$).

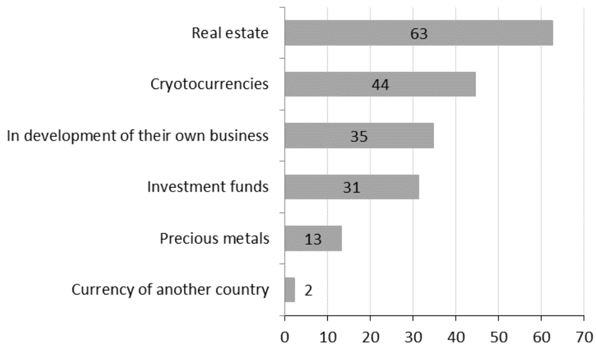

Fig. 4. Financial investment instruments.

The financial literacy index of Kauno kolegija Higher Education Institution students shows that the level of financial literacy of Kaunas kolegija Higher Education Institution students is average.

It can be seen that 50 % of respondents had a knowledge score above 8 (out of a possible 13), 25 % of respondents had a knowledge score below 7 (out of a possible 13) and the remaining 25 % had a knowledge score above 9 (out of a possible 13) for the budget group of questions. The lowest and highest scores accordingly were 4 and 11.5 (Fig. 5).

Half of the respondents' knowledge exceeded 10 points (out of a possible 12), while a quarter of the respondents' knowledge was below 9 points (out of a possible 12) or above 11.5 points (out of a possible 12) for the credits and debts group of questions The lowest and highest scores accordingly were 4 and 12 (Fig. 5).

50 % of respondents scored above 18.9 (out of a possible 26) and 25 % scored above 21.6 (out of a possible 26) in the savings and investments group. However, there were also some respondents whose score did not exceed 14.9 points (out of 26 possible), the lowest and the highest scores accordingly were 5.4 and 25.4 (Fig. 5).

The group of financial responsibility questions had 32 points. It can be noted that half of the respondents' knowledge of financial responsibility exceeded 22 points (out of a possible 32), a quarter of the respondents' knowledge did not exceed 20 points (out of a possible 32), and the remaining 25% scored above 25 points (out of a possible 32) in this group of questions. The lowest score was 11 and the highest was 30 (Fig. 5).

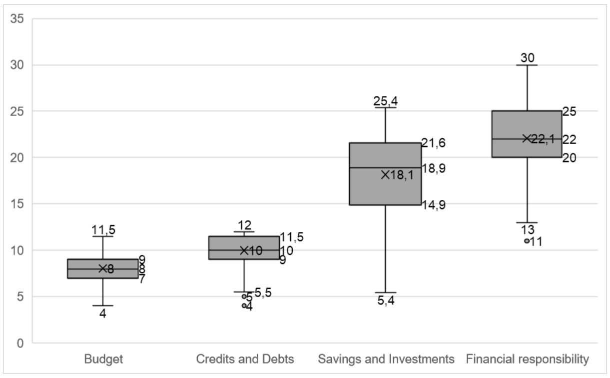

Fig. 5. Visualisation of financial literacy index quartiles (by questions groups) of respondents' answers.

The overall score of the financial literacy index (quartile width 2÷6.7) suggests that respondents' knowledge of savings and investings is more uncertain than their knowledge of budgeting, credits and debts, and financial responsibility. Respondents' general knowledge is adequate, but it is at different levels. There were respondents with a very low level of knowledge and those with a sufficiently high level of knowledge (Fig. 6).

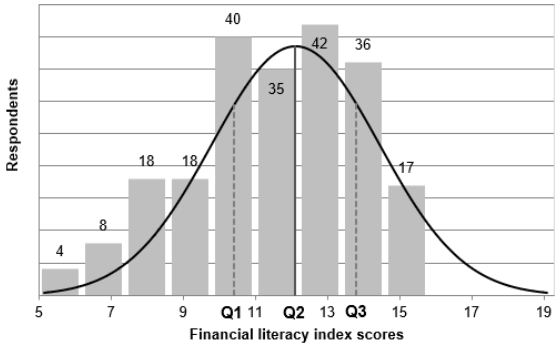

Fig. 6. Distribution of financial literacy index scores.

A non-parametric Chi Square test and correlation analysis were used to determine whether differences exist between demographic groups and what determines financial literacy level. When statistically significant differences ($p < 0.05$) are examined it can be noted that:

- 77.1 % of Faculty of Business respondents would like to know more about money management (versus 63.2 % of Faculty of Technology, $p = 0.045$); 64.8 % of Faculty of Business respondents don't spend more money than they receive (versus 50.9 % of Faculty of Technology, $p = 0.08$). 81.9 % of Faculty of Business respondents are likely to first compare the terms of different credit institutions before buying things on credit (versus 64.9 % of Faculty of Technology, $p = 0.14$). When respondents think of buying an expensive item, 53.3 % of Faculty of Business respondents would tend to save (versus 30.7 % of Faculty of Technology, $p < 0.001$).

- 61.4 % of Faculty of Technology respondents improve their financial knowledge independently (versus 41.9 % of Faculty of Business, $p = 0.004$). Even 89.5 % of Faculty of Technology respondents say they acquire financial knowledge outside Kauno kolegija Higher Education Institution (versus 67.7 % of Faculty of Business, $p < 0.001$).

When it looked for differences between the groups of respondents who earn or who "live out of parents' pockets", we can see that:

- 53.7 % of working respondents tend to agree with the statement that their current expenses are lower than their income (versus 34.7 % unemployed respondents, $p = 0.037$); 67.8 % of working respondents reduce their expenses when they run out of money (versus 17.3 % unemployed respondents, $p = 0.012$); 77.5 % of working respondents do not like to take money from relatives (versus 60.3 % unemployed respondents, $p = 0\ 009$). Similarly, 80.2 % of working respondents are not willing to borrow (versus 68.4 % of unemployed respondents, $p = 0.045$).

- Working respondents are more likely to save than unemployed respondents. 52.9 % of the working respondents save regularly, putting aside a certain amount each month (versus 38.8 % of unemployed respondents, $p = 0.089$, this is not statistically significant). 16.5 % of the working respondents are involved in saving in pension funds (versus 4.1 % of unemployed respondents, $p = 0.003$). 55.3 % of working respondents do not plan to invest due to a lack of knowledge (versus 83.8 % of unemployed respondents, $p = 0.007$) (Fig. 7).

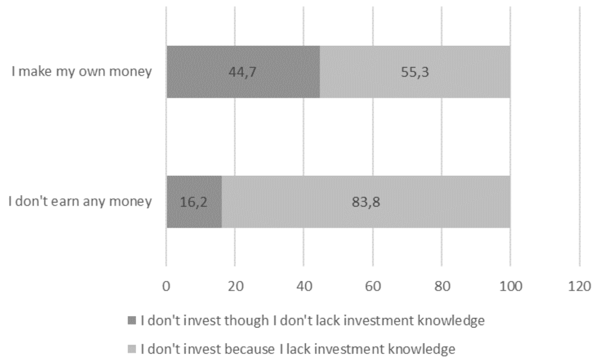

Fig. 7. Correlation of working and non-working respondents with reasons for non-investment/

When it was looked for a correlation between savings and investments and budgeting, it can be seen that planning future income and expenditure is directly related to saving habits ($r = 0.213$, $p < 0.01$). When respondents run out of money then spending is reduced but the investment is not planned because there is not enough money ($r = 0.265$, $p < 0.05$) and they usually have a lack of knowledge ($r = 0.289$, $p < 0.05$). When there is an opportunity to earn extra money, investing is more acceptable and possible ($r = 0.137$, $p < 0.05$). Respondents who rate their ability to manage their finances are good enough are more likely to invest ($r = 0.42$, $p < 0.01$) and not keep their money in a bank account or at home ($r = 0.209$, $p < 0.01$).

When it was looked at the financial responsibility and budget link it can be seen that setting long-term goals has a direct impact on cost reduction ($r = 0.251$, $p < 0.01$).

Respondents report that when they run out of money they are able to save money because they are able to earn extra money ($r = 0.146$, $p < 0.05$). And the extra work allows them to pay bills and cover expenses ($r = 0.290, p < 0.01$). The ability to manage one's finances is directly related to financial knowledge ($r = 0.222$, $p < 0.01$) and it is encouraging to compare prices when buying something ($r = 0.139$, $p < 0.05$) or to compare the terms of different credit institutions ($r = 0.205, p < 0.01$).

In summary, almost a third (33.1 %) of respondents are aware of the timeframe needed to access finance for a "rainy day". Almost a third (31.7 %) of respondents sometimes spend more than they receive. It can be assumed that the smaller the amount of money they have in reserve, the more they are willing to buy things on credit. Respondents named the main reasons for not investing: lack of knowledge, insufficient amount of money (91,3 % of respondents think that they will not have enough money for investing in the future) and do not see the need for investment ($r = 0.238, p < 0.05$). Although most of them (over 75 %) understand about diversification of investment.

Working respondents spend more than their income. When they run out of money then they cut back money unless they receive money from relatives but are not willing to borrow from them. It was observed a statistically significant difference that working respondents are more tend to save than unemployed respondents; 34.7 % of working respondents are likely to invest (versus 19.4 % of unemployed respondents $p = 0.012$) when evaluating the differences in the context of saving habits. Also, working respondents tend to save and save a regular amount each month. What is more, they tend to save in pension funds.

Both men and women tend to say that they did not learn the basics of financial management at Higher Education Institutions. It can be noted that even 87.4 % of men agree (versus 69 % of women, $p = 0.001$) with that. More of Faculty of Business respondents are deepening their financial knowledge outside Kauno kolegija Higher Education Institution. In terms of their financial management skills, 81 % of women would like to learn more about money management (versus 60.5 % of men, $p = 0.004$). 71 % of women would like to improve their financial literacy in the area of savings (versus 54.6 % of men, $p = 0.013$). When unemployed respondents are assessing their financial skills, even four-fifths of them said that they want to learn more about money management (versus 61.2 % working respondents, $p = 0.003$) in Kauno kolegija Higher Education Institution.

IV. Conclusions

A questionnaire has been developed after the theoretical justification of the study and after the analysis of the instruments used by Lithuanian and foreign authors and organizations which measure financial creditworthiness. The questionnaire distinguished between the groups of budget, credits and debts, savings and investments and financial responsibility.

The analysis of the results of the study suggests that:

- The study found that goal setting has a direct impact on reducing students' expenses. Students who are able to manage their finances have more financial knowledge because they are improving their financial knowledge and are more likely to compare the prices of things or the terms of different credit institutions.

- In addition, two-thirds of working students cut back spending when money is tight. It was observed that the vast majority of working students do not tend to borrow from family or friends.

- The ability to manage your finances directly depends on deepening your financial knowledge, encouraging you to compare prices when buying something, compare the conditions of different credit institutions.

- In addition, a better financial situation makes it possible to regularly save and evaluate the financial situation before buying an expensive item. Students' saving habits depend on budget planning. Students are more likely to put money aside for a "rainy day" than to invest it. Students who invest their savings usually choose to invest in cryptocurrencies, real estate, investment funds or their own business.

- In terms of gender differences, women are: much more likely to receive scholarships; learned "to do charity" in the family; when they run out of money they sell an item or borrow from family and / or friends; interested in and deepen knowledge about money management; feeling responsible for repaying their loans if the person they have guaranteed for fail to meet commitments; not willing to invest their savings. On the other hand, men are much more likely to invest and they are willing to take risks when investing (for example, investing in cryptocurrencies) even though they know that an investment with a high return is very risky; they look into and learn about the conditions of loans and credits; they put aside money when they have money left over and plan where to spend it later on; if they run out of money, they take their savings or cut down on spending money. When it comes to financial management and financial literacy, women still stick to stereotypical activity.

Highlighting the students' level of financial literacy and the financial literacy index, it can be observed that the student's general knowledge is adequate, but it is at different levels. Among the students who participated in the study dominated the average level of financial literacy.

References

[1] K. Taujanskaitė, "Finansinis raštingumas – kam jis reikalingas?" 2021-08-12. [Online]. Available: https://www.lrt.lt/naujienos/verslo-pozicija/692/1467548/kamile-taujanskaite-finansinis-rastingumas-kam-jis-reikalingas. [Accessed: January 7, 2023].

[2] OECD, "Pisa 2021 financial literacy analytical and assessment framework", April 2019. [Online]. Available: https://www.oecd.org/pisa/sitedocument/PISA-2021-Financial-Literacy-Framework.pdf. [Accessed: January 15, 2023].

[3] L. Klapper, A. Lusardi and P. van Oudheusden, “Financial Literacy Around the World”. [Online]. Available: https://gflec.org/wp-content/uploads/2015/11/3313-Finlit_Report_FINAL-5.11.16.pdf?x73794. [Accessed: January 16, 2023].

[4] OECD, “OECD / INFE 2020 International Survey of Adult financial Literacy”, August 12, 2021. [Online]. Available: https://www.oecd.org/financial/education/oecd-infe-2020-international-survey-of-adult-financial-literacy.pdf. [Accessed: January 20, 2023].

[5] S. K. Agarwalla, S.K. Barua, J. Jacob, and J. R. Varma, “Financial literacy among working young in urban India”, Indian Institute of Management Ahmedabad, Working Paper No. 2013-10-02, 2013, https://doi.org/10.1016/j.worlddev.2014.10.004 pp. 101-109.

[6] A. García-Santillán, L. Navarro-Ibarra, V. S. Molchanova and D. L. Q. Castro, “Financial Literacy Level: An Emparical Study on Savings, Credit and Budget Management Habits in High School Students”, European Journal of Contemporary Education, 2021, 10 (4), e_ISSN 2305-6746, pp. 897-911.

[7] A. A. Hung, A. M. Parker, J. and Yoong, J., “Defining and measuring financial literacy”, Social Science Research Network, Working Paper No 708, RAND Corporation, Santa Monica, CA, 2009. [Online]. Available: https://www.rand.org/content/dam/rand/pubs/working_papers/2009/RAND_WR708.pdf. [Accessed: January 20, 2023].

[8] S. Huston, “Measuring Financial Literacy: a literature revie”, The Journal of Consumer Affairs, vol. 44, issue 2, Special Issue: Financial Literacy, 2010, pp. 296-316.

[9] S. Kendirli, M. S. Kaya, M, A. Isleyen, “Determination of Financial Literacy Level: A Study on Hitit University Faculty of Economics and Administrative Sciences Students”, Journal of Economic Development, Environment and People, vol. 10, issue 4, online ISSN 2285-3642, ISSN-L 2285-3642, 2021, pp.29-41

[10] Vilnius Gediminas Technical University, “VGTU profesorė Jelena Stankevičienė: „Žmonėms trūksta finansinio raštingumo dėl dviejų priežasčių“. [Online]. Available: https://vilniustech.lt/vilnius-tech-naujienu-portalas/naujienos/vgtu-profesore-jelena-stankeviciene-zmonems-truksta-finansinio-rastingumo-del-dvieju-priezasciu/246059?nid=305208. [Accessed: January 25, 2023].

[11] Lietuvos bankų asociacija, “Lietuvos finansinio raštingumo indeksas: situacija gerėja, tačiau progresas per lėtas”. [Online]. Available: https://www.lba.lt/lt/apie-mus/asociacijos-naujienos/lietuvos-finansinio-rastingumo-indeksas-situacija-gereja-taciau-progresas-per-letas. [Accessed: January 20, 2023].

[12] Lietuvos bankas, “Visuomenės finansinio švietimo 2017 – 2021 m. planas”. April 1, 2021. [Online]. Available: https://www.lb.lt/uploads/documents/files/Visuomen%C4%97s%20finansinio%20%C5%A1vietimo%202017%E2%80%932021%20m_%20planas(1).pdf. [Accessed: January 20, 2023].

[13] J. Fernando, “What is financial literacy, and Why is it so important”, updated August 15, 2022. [Online]. Available: https://www.investopedia.com/terms/f/financial-literacy.asp. [Accessed: January 20, 2023].

[14] Evrfi from Blackbaud, “Financial Literacy for Kids, Too? Definitely, Here‘s Why”. [Online]. Available: https://everfi.com/k-12/financial-education-literacy/elementary-school/#:~:text=While%20we%20know%20that%20financial%20literacy%20is%20undeniably,are%20typically%20in%20first%20through%20sixth%20grade.%20. [Accessed: January 20, 2023].

[15] Švietimo, mokslo ir sporto ministerija, “Finansinio raštingumo ugdymas Lietuvoje: koks jis? Ką reikėtų tobulinti?”, Švietimo problemos analizė, nr. 12 (190), 2020-12, ISSN 2669-0977.

[16] A. Lusardi, O. S. Mitchell, “The Economic Importance of Financial Literacy: Theory and Evidence”, Journal of Economic Literature, 52(1), 2014, pp. 5-44

[17] Vilnius Gediminas Technical University, “National economic exam”. [Online]. Available: https://ekonomikosegzaminas.lrt.lt/. [Accessed: March 22, 2023].

[18] Swedbank bankas, “Pasimatuok savo finansinį IQ!”. [Online]. Available: https://blog.swedbank.lt/finansinio-iq-testas. [Accessed: April 3, 2022].

[19] Virginia Tech; “College student financial literacy survey”. [Online]. Available: https://vtechworks.lib.vt.edu/bitstream/handle/10919/35407/CSFLC_Survey.pdf. [Accessed: April 3, 2022].

[20] OECD, “International Network on Financial Education, Measuring Financial Literacy: Questionnaire and Guidance Notes for Conducting an Internationally Comparable Survey of Financial Literacy”. [Online]. Available: https://www.oecd.org/finance/financial-education/49319977.pdf. [Accessed: April 3, 2022].

[21] South Seattle Community College, “Student Financial Literacy Survey”. [Online]. Available: https://www.surveymonkey.com/r/VRFN7T3. [Accessed: April 3, 2022].

[22] A. C. G. Potrich, K. M. Vieira, and W. Mendes-Da-Silva, “Development of a financial literacy model for university students”, Management Research Review, vol. 39 No. 3, 216, 2015, pp. 356-376