Sustainability Literacy and Financial Literacy of Young People in the Baltic States

Dainora Gedvilaitė [1], Tadas Gudaitis [2,*], Giedrė Lapinskienė [1], Justinas Brazaitis [2], Jurgis Žižys [2] and Askoldas Podviezko [3,4]

1 Faculty of Economics, Vilniaus Kolegija/University of Applied Sciences, LT-01141 Vilnius, Lithuania
2 Business School, Vilnius University, LT-10225 Vilnius, Lithuania
3 Faculty of Public Governance and Business, University of Mykolas Romeris, LT-08303 Vilnius, Lithuania
4 Academic Department of Social Sciences, European Humanitarian University, LT-01126 Vilnius, Lithuania
* Correspondence: tadas.gudaitis@vm.vu.lt

Abstract: The stream of scientific articles on sustainability, financial literacy, and sustainability literacy shows their importance in the transformation process. New financial instruments with sustainable or green features have been introduced in the financial market. As a result, financial literacy is becoming more complex and the need for sustainability literacy is also increasing. Financial literacy now includes not only the knowledges, attitudes, and behavior of financial well-being but also positive impacts on environmental and social development. This article presupposes financial literacy and sustainability literacy are key instruments for the sustainable development of society. The aim of this article is to analyze the scientific literature on sustainability literacy and financial literacy and investigate the level of sustainability literacy and financial literacy among young people aged 15–30 years in the Baltic states. A systematic review of the literature was carried out followed by a survey, which revealed some differences between Estonia and Latvia and Lithuania in terms of sustainability and financial literacy levels.

Keywords: sustainability; sustainability literacy; financial literacy; personal finance management; Baltic states

1. Introduction

Recent decades have seen a dynamic rise in economic and industrial development across the globe. The collective activities of human beings have altered and are threatening the Earth's fragile ecosystems and the possibilities of reversing the damage are diminishing. The financial sector also plays a significant role in shaping and transforming the economy along sustainable principals. Younger generations have demonstrated a concern for the well-being of the planet and their behavior, decisions, and choices are making an impact on economic and sustainable finance development.

The definitions of sustainability and sustainability literacy are relatively new both in the academic literature and in practical activities and are constantly changing due to rapid environmental, economic, and social development. In 1987, the United Nations Brundtland Commission defined sustainability as "meeting the needs of the present without compromising the ability of future generations to meet their own needs" [1]. Ruggerio [2] proposes that a definition or conceptual model of sustainability complies with the following criteria: (a) account for the complexity of socio-ecological sustainability by encompassing economic, ecological, social, and political factors; (b) account for intergenerational and intragenerational equity; and (c) address the hierarchical organization of nature, that is, acknowledge the feedback between socio-ecological sustainability and its surroundings. The United Nations Sustainable Development Goals (17 themes) have become the strongest directive for sustainability education policy and practice [3]. Moreover, the United Nations [4] is actively raising awareness of the importance of sustainability literacy. Sustainability literacy

is defined as "the knowledge, skills and mindsets that allow individuals to become deeply committed to building a sustainable future and assisting in making informed and effective decisions to this end" [5]. Diamond and Irwin [6] defined sustainability literacy as "having the understanding, skills, attitudes and attributes to take informed action for the benefit of oneself and others, now and into a long-term future".

Many researchers have conducted analyses of financial literacy as an important instrument for society's development. Financial literacy is a specific component of human capital, which allows an individual to deal with fundamental financial issues to make adequate financial decisions. A financially literate individual, therefore, has the capacity to acquire financial skills and capabilities and is motivated to critically reflect on what influences their financial decision-making before applying their financial skills and capabilities to the financial dilemmas they face. Financial literacy education is about the teaching of personal financial skills and capabilities, with the direct intention of increasing an individual's financial literacy through the acquisition of skills and capabilities. The terms financial literacy, financial knowledge, and financial education are often used interchangeably in the literature and popular media [7]. As the background for our research, we use the financial literacy definition provided by the Organisation for Economic Co-operation and Development (OECD). Financial literacy is defined as the knowledge of financial products, skills, attitudes, and behaviors needed to make rational decisions and achieve individual financial well-being [8].

Sustainability literacy and financial literacy have been combined to form the new concept of "sustainable financial literacy". In the literature, sustainable finance has increasingly become the focus of empirical studies that seek to establish definitions, identify and analyze factors, and describe instruments. In some cases, climate finance, green finance, environmental finance, and sustainable finance are used interchangeably, with some small differences, with the common focus being to contribute to changing the world's economy for a sustainable future. The notion of sustainable finance literacy includes the elements that form traditional finance literacy, such as budgeting, saving, borrowing, investing and an awareness of sustainable financial products, sustainable investments, etc.

The aim of our research was to analyze and assess the sustainability literacy and financial literacy of young people in the Baltic States and to provide some insights and recommendations on how to improve the levels of sustainability literacy, financial literacy, and sustainable financial literacy in these states. To achieve this goal, the following objectives were set:

- To examine the scientific literature on sustainability literacy and financial literacy.
- To conduct a study in the Baltic States to investigate the level of sustainability literacy and financial literacy among young people aged 15–30 years in the Baltic states.

The authors carried out a scientific analysis of the literature and comparative analysis of statistical data from the conducted surveys for the last few decades.

2. Literature Review

2.1. Financial Literacy

The term financial literacy originated in the United States around 1990. The term became particularly popular after 2000, when major programs to improve financial literacy were launched. At the international level, the term became generally accepted when the OECD published a definition of the concept as a process that helps to improve the understanding of financial products and concepts, develops the ability to assess financial risks and opportunities, and helps to make the most beneficial financial decision (OECD 2005). Table 1 below highlights the most prominent definitions.

Table 1. Definitions of financial literacy.

Definitions	Author, Year
The ability to make informed judgments and to take effective decisions regarding the use and management of money.	Noctor, Stoney and Stradling, 1992 [9]
The ability to read, analyze, manage and communicate about the personal financial conditions that affect material well-being. It includes the ability to discern financial choices, discuss money and financial issues without (or despite) discomfort, plan for the future and respond competently to life events that affect everyday financial decisions, including events in the general economy.	Vitt et al., 2000 [10]
Basic knowledge that people need in order to survive in a modern society.	Kim, 2001 [11]
The ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being.	U.S. Financial Literacy and Education Commission, 2007 [12]
A person's ability to understand and make use of financial concepts.	Servon and Kaestner, 2008 [13]
The knowledge of fundamental financial concepts and the ability to do simple financial calculations.	Lusardi, Mitchell, 2011 [14]
A form of human capital investment, it stands to reason that some will find it optimal to invest in financial literacy while others will not.	Lusardi, Mitchell. 2014 [15]
The ability to use and awareness of knowledge and skills to manage financial resources to achieve maximum financial well-being.	U.S. Financial Literacy and Educatio Commission, 2018 [16].
A form of knowledge and the ability to apply that knowledge for good financial behavior.	Bongini et al., 2018 [17]
The use of financial knowledge to facilitate effective decision-making and guide financial behavior, with the goal of achieving financial security and wellbeing.	Sing and Lee, 2020 [18]
People's capabilities to understand financial concepts and to manage savings and investments safely.	Corsini and Giannelli, 2021 [19]

One of the first benchmark studies in financial literacy was the U.S. 2004 Health and Retirement Study (HRS), which included questions on this subject. It established the basis of a model for conducting studies in the financial field called the Big Three, which is based on three concepts: compound interest, inflation, and risk diversification indicate, where respondents command key economic concepts fundamental to savings and knowledge of risk diversification, crucial to informed investment decisions [20]. The basis of this methodology was proposed by OECD and its International Network on Financial Education (INFE), who developed a core questionnaire in 2011 [21]. The questions addressed a range of financial topics, including debt, insurance, spending, budgeting, inflation, investments, and saving for retirement. The methods used to measure financial literacy vary quite substantially according to the different conceptual definitions adopted. Across studies, both performance tests (usually multiple-choice questionnaires) and self-report methods have been employed to measure financial literacy [17]. The number of questions used to assess financial literacy levels also vary, ranging from 3 to 45 items.

Financial literacy can often be associated with successful stock investing, high investment returns, low interest rates, and balanced lending and retirement planning. In contrast, in a study in Japan, Kawamura et al. [22] showed that high financial literacy was often associated with speculative investing, over-borrowing, unbalanced and risky investment portfolios, and naïve financial decision-making. The authors concluded that the acquisition

of financial knowledge can lead people to overestimate their financial knowledge and thus lead them to make irresponsible financial decisions.

Studies of the financial literacy among young people have identified a range of issues that merit attention from the analysis of external factors such as cultural differences, the level of a country's development, and internal factors (such as gender, family wealth, or knowledge of mathematics). Moreno-Herrero et al. [23] identified three main factors influencing a young person's level of financial literacy: children's communication with their parents about financial management, young people's understanding of the importance of saving, and students' use of financial products. Recommendations regarding what governments should do to strengthen financial literacy at the national level include: improving young people's knowledge of mathematics; providing equal access to financial management education for both boys and girls; giving more attention to underachieving and vulnerable groups who may find it more difficult to educate or enlighten their children about financial management; and introducing financial management training initiatives not only for children but also parents, who can interact with their children to teach them how to make the right financial decisions.

According to the 2012 OECD's Program for International Student Assessment (PISA) study, the use of financial literacy knowledge correlates with a person's mathematics knowledge [24]. A survey was conducted in the Netherlands to find out what factors influence the level of financial literacy among 15-year-old students [25]. The results of the survey showed that, in addition to being from an immigrant background, their mothers' education, or talking to their families about financial management, school performance had a significant influence. It was observed that students with better than average grades responded better to the survey questions. Muñoz-Céspedes et al. [26] suggested the inclusion of the findings of psychological science and presented the combination of awareness, knowledge, skills, attitudes, and behaviors that help people make informed financial decisions that ensure their present and future financial well-being.

The concept 'financial literacy' now includes not only the knowledge of math, attitudes, and behavior of financial well-being but also positive impacts on environmental and social development. The concept 'sustainable finance literacy' can be presented like the updated concept of financial literacy, incorporating the knowledge of sustainability in making financial decisions. The importance of such new concept development has been raised by OECD. The combination of two concepts was discussed on 18 May 2018 at the 5th OECD-GFLEC global policy research symposium, where the key role of financial education in supporting sustainable and inclusive growth, and the relationship between financial education policies and broader economic, financial, and social outcomes were analyzed (OECD, 2018). The practitioners have suggested the definition 'sustainable finance literacy', meaning an understanding of sustainable financial products and their use for promoting sustainable development goals, plays a key role in the integration of ESG factors into financial decisions [27]. Filippini et al. [28] conducted research with Swiss households and measured the sustainable financial literacy using two complementary approaches (traditional multiple-choice questions and based on open-ended questions). The results revealed that Swiss households exhibited a low level of sustainable finance literacy. The authors presented the concept of sustainable finance literacy as the retail investors' knowledge of regulations, norms, and standards for financial products with sustainable characteristics [28]. Therefore, this article analyzes these two concepts separately as a mandatory part of education in modern society. In analyzing financial literacy, the authors are in line with the definition of Corsini and Giannelli [19] by supplementing the definition of the importance of understanding sustainable financial products. This article contributes to the new direction of financial literacy, where the importance of sustainability knowledge is equally valued.

2.2. Sustainability Literacy

Sustainability literacy is a separate stream that has been developing very rapidly since the Sulitest (Sustainability Literacy Tools & Community) was created following the Rio+20 Conference as an easy to use, online, multiple-choice assessment platform, consisting of a set of questions identical for all users throughout the world, and other specialized modules that consider national, regional, and cultural realities [4]. The proposed Sustainability Literacy Test by UN is an open online training and assessment tool, which is dedicated to educating a large part of society. The most common instrument employed to test sustainability knowledge is in the form of a quiz and focuses on knowledge. Relatedly, Zwickle et al. [29] assessed the sustainability literacy of undergraduate students at the Ohio State University (1000 students) using a web-based and campus-wide survey, which featured 16 multiple-choice questions. This study discovered that an average of 69% of the students answered the questions correctly. A surprising finding was that aeronautical engineering students performed better than the rest of the students [29]. Décamps et al. [30] clarified the definition of 'sustainability literacy', which can be defined as the knowledge, skills, and mindsets that help compel an individual to become deeply committed to building a sustainable future and allow him or her to make informed and effective decisions to this end. The authors presented the tool's structure and the contribution of measuring sustainability literacy globally and recommended it for educational institutions. Akeel et al. [31] assessed the sustainability literacy of the Nigerian engineering community based on three criteria: level of awareness of the UN program for SD in Africa, performance on sustainability literacy tests, and self-assessment of sustainability knowledge. The results revealed that a low level of sustainability knowledge and the Nigerian engineering community were more familiar with economic topics [31]. Following the same methodology used by Akeel et al. [31], the authors surveyed the research of future managers with a Post Graduate Diploma in Management and Master of Business Administration in India for sustainability literacy. The findings revealed that students were more familiar with social and economic sustainability and had less awareness of environmental issues [32].

We suggest the term 'sustainable literacy' as knowledge of sustainable development goals presented by UN, especially stressing the importance of environmental issues. Theoretical analysis shows that financial literacy and, especially, sustainability literacy should be taught as soon as young people begin to make simple financial decisions independently. For this reason, a study on sustainable financial literacy of young people was carried out in Lithuania, Latvia, and Estonia to compare the level of sustainability literacy and financial literacy. The findings expanded the group of articles analyzing different levels of financial and sustainability literacy in different countries. From our knowledge, there is no research assessing both sustainability literacy and financial literacy in the Baltic countries.

3. Materials and Methods

According to the Data of Statistics Lithuania, 500,933 persons aged 15–30 years lived in Lithuania in 2021; according to the data of Statistics Latvia, there were 305,979 people aged 15–30 in 2021; and according to the Estonian Department of Statistics, there were 222,521 people aged 15–30 in Estonia in 2021. The number of surveys completed in the three states were as follows: 387 questionnaires in Lithuania, 392 questionnaires in Latvia, and 400 questionnaires in Estonia. The survey was completed in the second half of 2021, starting in Lithuania and then Latvia and Estonia. The survey was translated into Lithuanian whereas in Latvia and Estonia, the survey was administered in English.

The questionnaire (see Appendix A for details) had the following structure:

Four questions (No. 2, 4, 12, 13) that help assess the sustainability and financial knowledge of respondents.

Four questions (No 11, 14, 15, 16) that help to measure the financial knowledge of young people.

Two questions (No 10, 17) that help assess sustainability-related knowledge.

Three questions (No 1, 3, 7) that help to understand young people's behavior when making financial decisions.

Four questions (No 5, 6, 8, 9) that help measure people's behavior in making sustainable finance decisions.

Four questions (18, 19, 20, 21) that help to determine the demographics of the surveyed persons.

4. Results

The first block of questions sought to clarify the level of knowledge respondents had about sustainability. Figure 1 shows respondents' answers to the question "*In your opinion, what would be the expected return on investment when investing in sustainable financial instruments (stocks, bonds, etc.)?*"
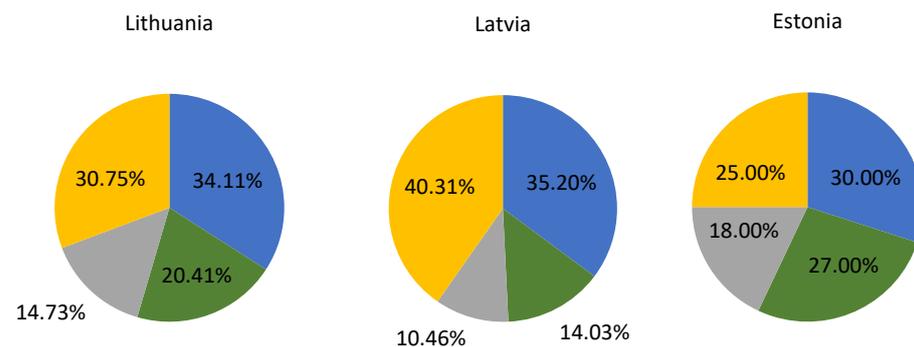
Figure 1. The respondents' opinion on the expected return on investment by investing in sustainable financial instruments in Lithuania, Latvia, and Estonia (ranking order). Source: authors. Notes. Colors denote the expectations of respondents of returns as follows: Blue means higher than on average investment; green means not be too different from an investment in unsustainable companies; grey means below average; yellow: I am not competent to answer this question.

The results in Figure 1 suggest that young people in all three Baltic countries lack an understanding of the value created by sustainable investment as almost half of the respondents identified themselves as "not competent "or assumed that the investment return from sustainable financial instruments would be below average.

More thorough investigation extends the above conclusion for the entire population of the three countries with the above characteristics. The level of significance was chosen as $\alpha = 0.05$. The sum of responses in all three countries was $k = 337$ and served as the statistics of the test of the following hypothesis. The average percentage of the ones who stated that they are not competent (32% = 337/1179) was used for estimation of the variance of the binomial distribution. Based on the special case of the central limit theorem related to the binomial distribution, the test of the following hypotheses can be performed.

Hypothesis 0 (H0). *Half of respondents identified themselves as being competent to answer the question "In your opinion, what would be the expected return on investment when investing in sustainable financial instruments (stocks, bonds, etc.)?"*

Hypothesis 1 (H1). *Less than half of the respondents identified themselves as being competent to answer the above question.*

The following appropriate test statistics formula was applied for the binomial distribution:

$$Z = \frac{k - np}{\sqrt{np(1-p)}}. \tag{1}$$

For $p = 0.32$, $n = 1179$, the size of the population (the number of responses obtained in all the three countries in question), we obtain the realization of the test statistics $Z = -12.38$, which is less than the threshold for the standard normal distribution for the chosen level

of significance −1.645. Therefore, with the stated level of significance, we can choose to accept the alternative hypothesis H1.

The results of the academic study (Unruh et al. [33]) and practical research (Morningstar [34]), showing that sustainable instruments create value and that their return on investment is higher than traditional investments, should be more effectively communicated to a larger younger population.

Further clarification on the level of respondents' knowledge about sustainability was requested using the concept of green economy (Figure 2). The term was defined in the questionnaire: "*A term used to describe the pursuit of human well-being in an effort to minimize the adverse effects on nature by reducing greenhouse gas emissions and making the most efficient use of non-renewable resources.*"
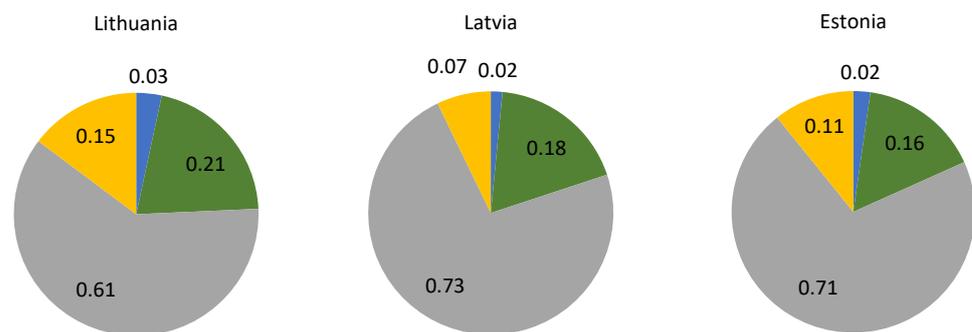
Figure 2. The ability of respondents to explain the concept of green economy in Lithuania, Latvia, and Estonia (ranking order). Source: authors. Notes. Colors denote the options chosen by respondents. Blue—sanitation; green—renewable energy; grey—green economy; yellow—the circular economy.

The results presented in Figure 2 show that a large proportion of young people in the Baltic States are aware of green economy policies aimed at reducing environmental pollution. Latvians and Estonians appeared to be more knowledgeable than Lithuanians in this regard. The difference between Lithuania and Latvia was statistically significant, in contrast to other pairs. In fact, the standard deviation of the corresponding normal distribution for the estimation of the differences of proportions in all three pairs of countries ranges from 6.32 to 6.64 while the differences of proportions appear to be considerable only between Lithuania and Latvia, with the corresponding *p* value 0.039, which relates to the calculated *Z* value:

$$Z = \frac{0.7296 - 0.6098}{\sqrt{p_a(1 - p_a) / \left(\frac{1}{387} + \frac{1}{392}\right)}} = -1.826, \tag{2}$$

where p_a is the average proportion of positive answers between respondents in the two countries in question. Thus, as Lithuania was distinguished in this regard with the chosen level of significance $\alpha = 0.05$, we believe that such a bias can be mitigated by explaining and promoting to the public various programs, such as European Green Deal or similar.

When it comes to behaviors related to making sustainable decisions, the results show that the price of a product is still more important for young people than a producer's social responsibility, product packaging structure, or the impact of production on the environment (Figure 3).

When it comes to UN Sustainable Development Goals (SDGs) and the environmental, social, and governance (ESG) perspective, the survey showed that the most important factors for young people in the Baltic states are social factors such as workers' rights, human rights, and governance issues such as preventing corruption, rather than environmental issues such as climate change or air and water pollution (Figure 4). The respondents were asked the question "*Imagine that you have inherited a controlling stake in an international company and you have to make the most important decisions for the company. Which of the following global and local issues would your company prioritize? (select only 3 options)*".
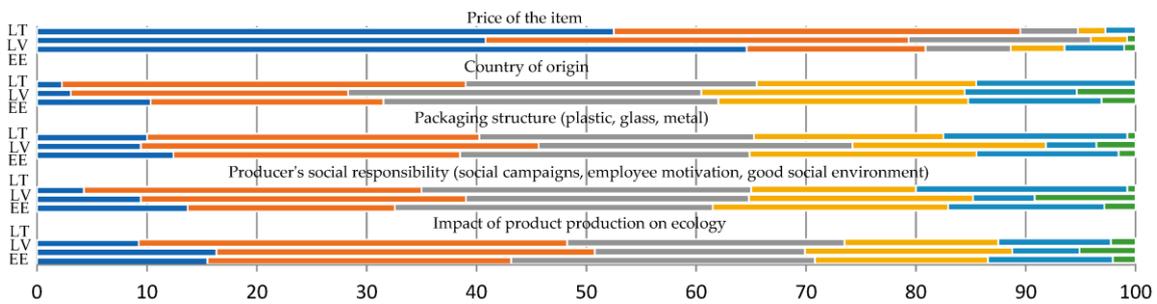
Figure 3. The importance of different factors when selecting a product for respondents in Lithuania (LT), Latvia (LV), and Estonia (EE) as a percent of the total responses. Source: composed by authors. Notes. Colors denote the grades of the Likert scale as follows. Blue means strongly agree; salmon means I agree more than I disagree; grey means neither agree nor disagree; yellow means I disagree more than I agree; sky blue means strongly disagree; green means I cannot answer.
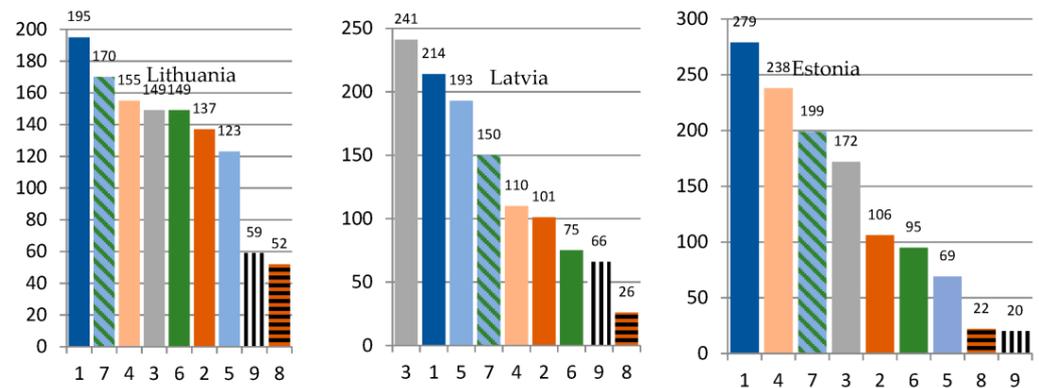
Figure 4. Prioritization of global and local issues in Lithuania, Latvia, and Estonia and the number of responses in the sample. Source: authors. Notes. Numbers denote the following questions. 1. Fight for workers' rights, raising workers' salaries, preserving jobs; 2. Support the fight for human rights; 3. Fight corruption; 4. Fight climate change; 5. Contribute to the fight for animal rights; 6. Promote gender equality; 7. Reduce air and water pollution; 8. Help national minorities to integrate in the country; 9. Encourage the phasing out of nuclear power generation.

The second block of questions sought to clarify the level of knowledge of respondents' financial literacy and personal finance management. The two questions were adopted from Lusardi et al. [35]: (1) the inflation effect on savings: "*Imagine you are making a deposit with an interest rate of 1% per year and inflation of 2% in the same year. How many of the same goods and services will you be able to buy with the amount of money available in one year?*"; and (2) diversification of investments: "*By investing in the stock market, the risks of the investment can be reduced by investing in a wide range of shares of different companies*". The results show that in both cases, young people in Estonia have higher financial literacy knowledge compared to young people in Latvia and Lithuania.

This research also aimed to identify the channels through which young people in the Baltic States acquire financial literacy knowledge and learn to manage their personal finances. The results show that parents and media are the mains sources of information and knowledge (Figure 5).

Finally, the survey sought to compare how young people in the Baltic States put financial literacy knowledge into practice. The effective use of financial literacy knowledge is often associated with investment, so in our research, we also tried to find out what proportion of young people's income is a return on investment (Figure 6).
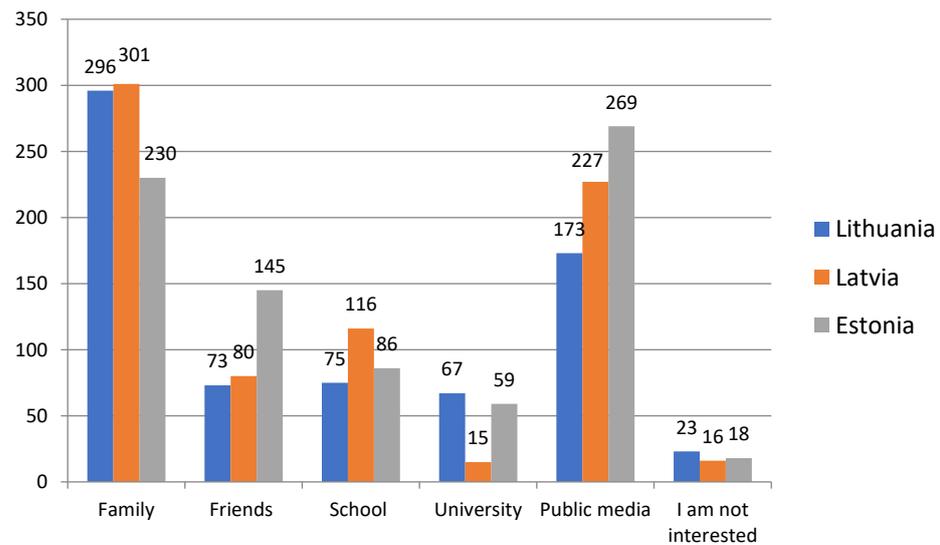
Figure 5. Places and sources of learning for managing finances. Source: authors.
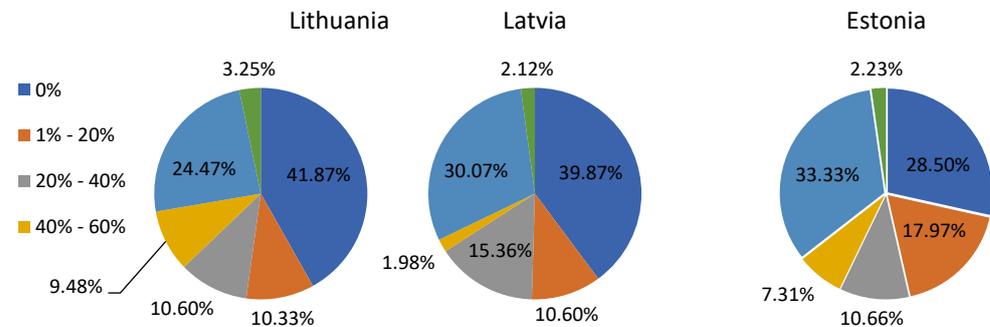
Figure 6. Share of respondents' annual income generated from investment returns in Lithuania, Latvia, and Estonia (order order). Source: authors.

The results show that over half of the young people in Lithuania do not invest or do not benefit financially from their investments. In Latvia, about half are investment-averse, and in Estonia, more than half receive at least some financial benefit from their investments. The first and the last statements can be verified by statistical means. In fact, the difference between half of the responses and the actual realization is 49.5 votes for Lithuania and −27 for Estonia, which produces a Z score of 5.03 and −2.7, respectively. Both obviously confirm the conclusion of a considerable difference with half of the population, with the chosen level of significance $\alpha = 0.05$, corresponding to left- and right-hand 5% probability thresholds of +1.645 and −1.645 of the standard normal distribution, respectively.

It can be noted that when assessing financial knowledge, Estonians proved to be better informed than Lithuanians and Latvians. On the other hand, Latvians received a higher financial return than Lithuanians or Estonians, which shows that the level of financial literacy does not necessarily correlate with the financial behavior of young people and the return on investment in financial decisions made. A large proportion of young people do not obtain any financial returns, but a significant proportion do try or have tried to invest to improve their financial situation. It is quite interesting to note that in Lithuania and Estonia, men invest more and obtain a greater return on their investment, but in Latvia, the numbers of men and women are similar.

5. Discussion

This paper adds to existing research and knowledge by analyzing what young people know (and do not know) about sustainability and financial literacy using a set of simple questions. The results of our study reveal that young people have different levels of financial

and sustainability literacy in the Baltic States despite Estonia, Latvia, and Lithuania being neighboring countries and having a similar level of economic and social development. Comparing the results of the financial literacy of young people with other similar studies, it can be noted that the financial literacy level is quite high in Baltic countries. The study by Lusardi et al. (2010) [35] revealed that only 27% of young US citizens knew about inflation and risk diversification and could perform simple interest rate calculations while our research results show that more than half of young people knew about inflation and risk diversification in Estonia, Latvia, and Lithuania. We cannot exclude the possibility that during the decade, the general level and understanding of young people has increased and it might be a confusing comparison.

It is more difficult to assess sustainability literacy results and their context, as our study is one of the first in the field of sustainable literacy and sustainable financial literacy. The results of this study reveal that young residents in Baltic countries have sufficient knowledge about sustainability and the green economy. However, their behavior discloses the opposite results. When young people buy an item, the price becomes the most important criteria, and an item's impact on ecology Nd an item's producers' social responsibility are rather unimportant criteria. We did not detail the sectors of items in our study. Filippini et al.'s (2021) results show that specifically for owning sustainable finance products, the level of sustainable finance literacy is an important determinant, but both financial literacy and sustainability literacy do not have a statistically significant effect on holding sustainable assets for Swiss households.

Finally, this study's results show that for young people in the Baltics, social aspects are the most important from an ESG perspective. Fighting for workers' rights, preserving jobs, and supporting the fight for humans' rights was more important than promoting gender equality or reducing air and water pollution. We cannot exclude the possibility, that this is due to the constraints of the designed test, where answers related to social aspects were listed at the beginning, and environmental aspects were listed at the end. While we believe these limitations did not impact the primary outcome of this study, future research could seek to include additional questions to find out the importance of environmental, social, and governance factors (ESG) in relation to each other.

6. Conclusions

The results of this study suggest that the level of financial literacy among young people in the Baltic States is the highest in Estonia, followed by Lithuania and Latvia. A possible connection was observed between the level of financial literacy of young people and the sources of information young people use when learning how to manage their finances. Estonians' main source of financial management is public information in the media, whereas young people in Lithuania and Latvia learn from their parents. Lithuanians seem to be the most likely to save as the proportion of young people in Lithuania was the highest in terms of how many respondents had set savings goals.

Some connection was observed between the financial literacy of young people and sustainable financial behavior. The Estonian respondents had the best financial literacy knowledge and made the best sustainable financial decisions of the three Baltic States, even though they applied this knowledge quite poorly when making financial decisions. This connection does not seem to apply to the financial literacy among the Latvian respondents as their knowledge was limited compared to the Lithuanian respondents yet their sustainable financial behavior was better than that of young respondents in Lithuania. Shopping behaviors were more sustainable among Latvia's respondents than among Estonians, which also undermines this connection, as Latvian respondents' financial literacy was much lower than the Estonian financial literacy.

While the levels of financial literacy differed across the three states, the levels of knowledge about sustainability were quite similar.

With regards to developing sustainable literacy, financial literacy and sustainable finance recommendations vary as to when, where, and how such learning should take

place. There are a range of ideas about introducing this topic at different points, through different types and lengths of education and in both formal and non-formal settings. Specific suggestions include elective courses in higher education and workshops for those who do not attend high education. What most researchers do agree upon is that the levels of financial literacy and sustainability literacy are too low and that measures need to be taken to improve this situation, considering culture, age, gender, and other social and demographic aspects.

Author Contributions: Conceptualization, T.G. and D.G.; formal analysis, J.B., J.Ž. and A.P.; methodology, T.G. and A.P.; validation, A.P. and D.G.; writing—original draft preparation, G.L. and D.G.; writing—review and editing, T.G., G.L. and A.P.; visualization, G.L. and A.P.; supervision, T.G. All authors have read and agreed to the published version of the manuscript.

Funding: This research received no external funding.

Informed Consent Statement: Not applicable.

Conflicts of Interest: The authors declare no conflict of interest.

Appendix A. Questionnaire

1. Where did you learn/still learning to manage your finances?

- Parents/guardians (family)
- Friends Teachers (at school)
- Professors (at university)
- In the public information media (public media)
- I am not interested in personal financial management

2. Which of the following concepts would you be able to explain?

- Inflation
- Investment return
- Diversification
- Interest rate
- Financial planning
- Budget
- Sustainability (sustainable development)
- Accumulation for retirement Taxes

3. What proportion of your income is generated from investment's activities?

- 0%
- 1–20%
- 20–40%
- 40–60%
- 60–80%
- 80–100%

4. In your opinion, what would be expected return on investment by investing in sustainable financial instruments (stocks, bonds, etc.)?

- The expected return would be higher than from average investment
- The return on investment would not be too different from the investment in unsustainable companies
- The expected return would be lower than from average investment
- I am not competent to answer this question

5. When you are planning to buy a product, are the following are important for you:
I can't answer (0) Strongly Disagree (1) I disagree more than I agree (2)
Neither agree nor disagree (3) I agree more than I disagree (4) Strongly Agree (5)

- Price of the item

- Country of origin
- Packaging structure (plastic, glass, metal)
- Producer's social responsibility (social campaigns, employee motivation, good social environment)
- Impact of product production on ecology

6. To what extent do you agree with the following statements:
I can't answer (0)   Strongly Disagree (1)   I disagree more than I agree (2)
Neither agree nor disagree (3)   I agree more than I disagree (4)   Strongly Agree (5)

- Schools introduce basic knowledge of money/financial management to schoolchildren
- I actively contribute to the creation of a sustainable environment (sorting, composting, contributing to environmental management campaigns, etc.)
- Whenever I can, I choose other types of travel instead of personal transport with car (e.g., use public transport, bicycle, electric scooters, sharing platforms, etc. instead).
- I invest in sustainable companies
- I try to fix personal items when they break down, I try not to buy new ones
- When I go shopping, I always try to use my reusable bags or sacks.
- Before I go shopping, I make a shopping list

7. If you are saving money, what savings goals have you set: For a car

- For the holidays
- For buying a house (first instalment payment)
- For a safety pillow day (unfortunate day)
- I have no goals
- I'm saving, but I don't know for what
- Other option

8. In the last 12 months:
Yes   No   I can't answer

- You have checked how much return you have received for your purchase or service
- You paid with your smartphone
- You made a purchase that cost more than you wanted to spend on it
- You have checked how much money you have in total
- You donated/sold your used clothes to other people
- You bought secondhand clothes

9. Imagine that you have inherited a controlling stake in an international company and you have to make the most important decisions for the company. Which of the following global and local issues would your company prioritize? We would: (select only 3 options)

- Fight for workers' rights, raising workers' salaries, preserving jobs
- Support the fight for human rights
- Fight corruption
- Fight climate change
- Contribute to the fight for animal rights
- Promote gender equality
- Reduce air and water pollution
- Help national minorities to integrate in the country
- Encourage the phasing out of nuclear power generation

10. Which term fits this definition? "The ability of individuals or enterprises to be socially responsible and to ensure that their activities cause the least possible damage to the environment."

- Sorting
- Ecology
- Economy

- Sustainability

11. Which term fits this definition? "Ability to understand the simplest aspects of business and finance and apply this knowledge to make the right financial decisions."

- Economics
- Financial literacy
- Personal finance management
- Sustainable investment

12. Which term fits this definition? "A term used to describe the pursuit of human well-being in an effort to minimize the adverse effects on nature by reducing greenhouse gas emissions and making the most efficient use of non-renewable resources."

- Sanitation
- Renewable energy
- Green economy
- The circular economy

13. Which term fits this definition? "A responsible way of investing is not only seeking a return on investment, but also assessing the possibility of reducing potential damage to nature and the social environment."

- Sustainable investment
- Responsible investment
- Diversification
- Investing in raw materials

14. [Name or person] decided to travel to Trampandia. After arriving in this country, she realized that the currency used in Trampandia is TRP, and she, having arrived from [Lithuania/Latvia/Estonia], had not yet managed to change the EUR currency to TRP. At the time [Name or person] arrived in Trampandia, the exchange rate was 1 EUR = 20 TRP. Urte needs 240 TRPs to dine at the pizzeria. If [Name or person] decides to exchange money at a currency exchange, she will be charged a 4% commission fee, and if she decides to withdraw money from an ATM, she will have to pay a fixed 6 TRP fee. Which method of acquiring TRP currency should [Name or person] choose?

- Currency exchange should be used
- Should use an ATM

15. Imagine you are making a deposit with an interest rate of 1% per year and inflation of 2% in the same year. How many of the same goods and services will you be able to buy with the amount of money available in one year?

- More than last year
- As much as last year
- Less than last year

16. Is this statement correct: "By investing in the stock market, the risks of the investment can be reduced by investing in a wide range of shares of different companies"?

- Right
- Wrong

17. Imagine being able to reduce CO_2 emissions from different spheres of pollution. Which CO_2-generating facilities or processes would you focus on in order to reduce emissions? (Select only 3 options).

- Land transport
- Iron and steel industry
- Deforestation
- Air Transport
- Electricity and heat consumption in residential buildings

- Agriculture
- Livestock
- Electricity and heat consumption in commercial buildings
- For the production of cement

18. Gender:

- Woman
- Man

19. Age:

- (0–14)
- (15–18)
- (19–23)
- (24–26)
- (27–29)

20. Place of residence:

- Large City (>100,000 people)
- City (3000–100,000 people)
- Town (500–3000 people)
- Village (<500)

21. Education:

- I have no education
- Elementary school
- Middle school
- High school
- I am studying in the 1st cycle of studies
- Bachelor's degree
- I am studying in the 2nd cycle of studies
- Master's degree
- Studying at the 3rd study cycle
- Doctoral degree

References

1. Brundtland, G. *Report of the World Commission on Environment and Development: Our Common Future*; United Nations General Assembly Document A/42/427; United Nations: New York, NY, USA, 1987.
2. Ruggerio, C.A. Sustainability and sustainable development: A review of principles and definitions. *Sci. Total Environ.* **2021**, *786*, 147481. [CrossRef] [PubMed]
3. Sterling, S.H.; Glasser, M.; Rieckmann, A.; Warwick, P. More than Scaling up: A Critical and Practical Inquiry into Operationalizing Sustainability Competencies. *Envis. Futures Environ. Sustain. Educ.* **2017**, *10*, 153–168. [CrossRef]
4. United Nations. Available online: https://sustainabledevelopment.un.org/sdinaction/hesi/literacy (accessed on 20 June 2022).
5. Glavic, P.; Lukman, R. Review of sustainability terms and their definitions. *J. Clean. Prod.* **2007**, *15*, 1875–1885. [CrossRef]
6. Diamond, S.; Irwin, B. Using e-learning for student sustainability literacy: Framework and review. *Int. J. Sustain. High. Educ.* **2013**, *14*, 338–348. [CrossRef]
7. Huston, S.J. Measuring Financial Literacy. *J. Consum. Aff.* **2010**, *44*, 296–316. [CrossRef]
8. OECD. Available online: https://www.oecd.org/financial/education/oecd-infe-2020-international-survey-of-adult-financial-literacy-presentations.pdf (accessed on 11 July 2022).
9. Noctor, M.; Stoney, S.; Stradling, R. *Financial Literacy: A Discussion of Concepts and Competences of Financial Literacy and Opportunities for Its Introduction into Young People's Learning*; Report Prepared for the National Westminster Bank, National Foundation for Education Research: London, UK, 1992.
10. Lois, V.; Anderson, C.; Kent, J.; Lyter, D.M.; Siegenthaler, J.K.; Ward, J. *Personal Finance and the Rush to Competence: Financial Literacy Education in the U.S.*; Institute for Socio-Financial Studies: Middleburg, VA, USA, 2000.
11. Jinhee, K. Financial Knowledge and Subjective and Objective Financial Well-being. *Consum. Interests Annu.* **2001**, *47*, 1–3.
12. U.S. Financial Literacy and Education Commission. Available online: http://www.mymoney.gov/pdfs/add07strategy.pdf (accessed on 23 April 2022).
13. Servon, L.J.; Kaestner, R. Consumer Financial Literacy and the Impact of Online Banking on the Financial Behavior of Lower-Income Bank Customers. *J. Consum. Aff.* **2008**, *42*, 271–305. [CrossRef]

14. Lusardi, A.; Mitchell, O. Financial literacy and retirement planning in the United States. *J. Pension Econ. Financ.* **2011**, *10*, 509–525. [CrossRef]

15. Lusardi, A.; Mitchell, O. The Economic Importance of Financial Literacy: Theory and Evidence. *J. Econ. Lit.* **2014**, *52*, 5–44. [CrossRef] [PubMed]

16. U.S. Financial Literacy and Education Commission. Available online: https://www.treasury.gov/about/organizational-structure/offices/Domestic-Finance/Documents/Strategyeng.pdf (accessed on 9 May 2022).

17. Bongini, P.; Iannello, P.; Rinaldi, E.E. The challenge of evaluating financial literacy: Alternative data analysis methods within the Italian context. *Empir. Res. Voc. Ed. Train* **2018**, *10*, 12. [CrossRef]

18. Sing, M.C.; Lee, D.H. School Banding Effects on Student Financial Literacy Acquisition in a Standardised Financial Literacy Curriculum. *Asia-Pac. Educ. Res.* **2020**, *29*, 377–391. [CrossRef]

19. Corsini, L.; Giannelli, G.C. Economics education and financial literacy acquisition: Evolution from a field experiment. *J. Behav. Exp. Financ.* **2021**, *32*, 100556. [CrossRef]

20. Lusardi, A.; Mitchell, O. Financial Literacy and Planning: Implications for Retirement Well-being'. In *Financial Literacy: Implications for Retirement Security and the Financial Marketplace*; Mitchell, O.S., Lusardi, A., Eds.; Oxford University Press: Oxford, UK, 2011; pp. 16–39. [CrossRef]

21. OECD INFE. Available online: https://www.oecd.org/finance/financial-education/49319977.pdf (accessed on 12 June 2022).

22. Kawamura, T.; Mori, T.; Motonishi, T.; Ogawa, K. Is Financial Literacy Dangerous? Financial Literacy, Behavioral Factors, and Financial Choices of Households. *J. Jpn. Int. Econ.* **2021**, *60*, 101131. [CrossRef]

23. Moreno-Herrero, D.; Salas-Velasco, M.; Sánchez-Campillo, J. Factors that influence the level of financial literacy among young people: The role of parental engagement and students' experiences with money matters. *Child. Youth Serv. Rev.* **2018**, *95*, 334–351. [CrossRef]

24. PISA. Available online: https://www.oecd.org/daf/fin/financial-education/PISA2012FrameworkLiteracy.pdf (accessed on 12 June 2022).

25. Amagir, A.; Groot, W.; van den Brink, H.M.; Wilschut, A. Financial literacy of high school students in the Netherlands: Knowledge, attitudes, self-efficacy, and behavior. *Int. Rev. Econ. Educ.* **2020**, *34*, 100185. [CrossRef]

26. Muñoz-Céspedes, E.; Ibar-Alonso, R.; de Lorenzo Ros, S. Financial Literacy and Sustainable Consumer Behavior. *Sustainability* **2021**, *13*, 9145. [CrossRef]

27. Dumitrescu, A. Leaders with Sustainable Finance Literacy. Available online: https://dobetter.esade.edu/en/sustainable-financial-literacy (accessed on 22 April 2022).

28. Filippini, M.; Leippold, M.; Wekhof, T. *Sustainable Finance Literacy and the Determinants of Sustainable*; Swiss Finance Institute Research Paper No. 22-02; Swiss Finance Institute: Zürich, Switzerland, 2021.

29. Zwickle, A.; Koontz, T.M.; Slagle, K.M.; Bruskotter, J.T. Assessing sustainability knowledge of a student population: Developing a tool to measure knowledge in the environmental, Economic and social domains. *Int. J. Sustain. High. Educ.* **2014**, *15*, 375–389. [CrossRef]

30. Décamps, A.; Barbat, G.; Carteron, J.C.; Hands, V.; Parkes, C. Sulitest: A collaborative initiative to support and assess sustainability literacy in higher education. *Int. J. Manag. Educ.* **2017**, *15*, 138–152. [CrossRef]

31. Akeel, U.; Bell, S.; Mitchell, J.E. Assessing the sustainability literacy of the Nigerian engineering community. *J. Clean. Prod.* **2019**, *212*, 666–676. [CrossRef]

32. Sekhar, C.; Raina, R. Towards more sustainable future: Assessment of sustainability literacy among the future managers in India. *Environ. Dev. Sustain.* **2021**, *23*, 15830–15856. [CrossRef]

33. Unruh, G.; Kiron, D.; Kruschwitz, N.; Reeves, M.; Rubel, H.; zum Felde, A.M. Investing For a Sustainable Future. *MIT Sloan Manag. Rev.* **2016**, *57*, 1–31.

34. Morningstar. Available online: https://www.morningstar.co.uk/uk/news/203214/do-sustainable-funds-beat-their-rivals.aspx (accessed on 9 May 2022).

35. Lusardi, A.; Mitchell, O.S.; Curto, V. Financial Literacy among the Young. *J. Consum. Aff.* **2010**, *44*, 358–380. Available online: http://www.jstor.org/stable/23859796 (accessed on 30 July 2022). [CrossRef]