



Financial Literacy of People Gaining Economic Education in the Context of Acquired Practical Experience

Josef Polák¹ 
Zuzana Kozubíková² 
Aleš Kozubík³ 

Received: June 27, 2022

Accepted: July 20, 2022

Published: December 30, 2022

Keywords:

Decision making;
Economic education;
Finance;
Financial management;
Financial market



Creative Commons Non Commercial CC BY-NC: This article is distributed under the terms of the Creative Commons Attribution-Non-Commercial 4.0 License (<https://creativecommons.org/licenses/by-nc/4.0/>) which permits non-commercial use, reproduction and distribution of the work without further permission.

Abstract: *Financial literacy affects numerous economic decisions of people on a daily basis, as well as the strategic financial management of corporations. In several previous studies, the authors confirmed a significant difference in the level of financial literacy between full-time and combined students. Based on these results, they hypothesized that practical experience has a positive effect on the level of financial literacy, but this needed to be verified. Therefore, a new survey was conducted with an extended version of the questionnaire with questions specifically related to the practical use of financial products and services. Students of economics who have access to education that supports the growth of financial literacy were interviewed. However, the distribution of the examined groups was not determined by age, a form of study and other common aspects, but the divider was in form of the experience gained, which provided a unique approach using an adequate statistical set of respondents. The results from primary research showed differences in knowledge and the way of solving tasks in the monitored groups of respondents. Using statistical analysis methods and hypothesis tests, the authors' hypothesis was confirmed and it was shown that students using a wider range of services performed better. It provides usable interdisciplinary outputs for HRM, applied psychology, pedagogy and financial management. The level of financial literacy was tested by the personal finance index which is an innovative metric that analyses knowledge from the eight functional areas of financial literacy. Given that the research sample was drawn from a group of people studying financial management and entrepreneurship subjects, it was also confirmed that theoretical knowledge alone is not sufficient to significantly enhance financial literacy. Thus, the irreplaceability of practical experience for enhancing the level of financial literacy was demonstrated.*

1. INTRODUCTION

Financial literacy is one of the crucial skills of a citizen of modern society in the 21st century. We encounter the need to make the right financial decisions that can affect our entire future life almost every day. Whether it's securing our financial situation in old age, making the right decision to finance our own home or providing financial security in times of illness, it is always essential to make the right decision at an early stage. Therefore, it is extremely important to strengthen the financial literacy of young people as they are facing these life decisions but with minimal experience.

In our previous research (Kozubík, Kozubíková, & Polák, 2019; Polák, Kozubíková, & Kozubík, 2018), we compared the level of financial literacy of students in the face-to-face and distance

¹ College of Regional Development and Banking Institute – AMBIS, Department of Economics and Management, Lindnerova 575/1, 180 00 Praha 8, Czech Republic

² University of Žilina, Faculty of Managements and Informatics, Dpt. of Macro and Microeconomics, Univerzitná 8215/1, 010 26 Žilina, Slovakia

³ University of Žilina, Faculty of Managements and Informatics, Dpt. of Mathematical Methods and Operations Research, Univerzitná 8215/1, 010 26 Žilina, Slovakia

learning forms of study. It turned out that distance learning students achieved a higher success rate. Since these are students who have a permanent employment relationship, we concluded that their enhanced practical experience is the factor that positively influenced their results. In order to confirm this conjecture, it was considered necessary to conduct another survey, this time focusing on real practical experience.

In this follow-up survey, we focused on the relationship between practical experience with financial market products and the level of financial literacy. In doing so, we abstracted from the form of study and focused only on actual practical experience. In this spirit, we also formulated the research hypothesis.

H1: Students with more practical experience with financial market tools and services achieve higher levels of financial literacy.

2. LITERATURE REVIEW

There are a number of studies studying financial literacy in various social groups. Some of them are united by the claim that a higher level of financial literacy of respondents subsequently improved their financial decisions which seems to be logical. Van Rooij *et al.* (2011) measure financial literacy and examine its relationship to stock market participation in their research. They found that most respondents have basic financial knowledge and are familiar with concepts such as interest-bearing, inflation and the time value of money. The situation has changed for more complex concepts. Many respondents did not know the difference between bonds and stocks, the relationship between bond prices and interest rates, and the basics of risk diversification. Based on their findings, van Rooij *et al.* (2011) state that financial literacy influences financial decisions. People with lower financial literacy and low-wealth investors then invested less in stocks and often hold the wrong portfolio. The situation in which respondents move to a system where they have to decide how much to save for retirement and how to invest their retirement wealth is pushing them to change their approach.

According to the findings of Sun *et al.* (2021) financial literacy has a significant positive impact on the choice of wealth management products, risky financial assets and the total amount of retirement financial assets. On the other hand, it has a negative impact on the choice of bank savings. Another negative impact of financial literacy is on the proportion of savings but Sun *et al.* (2021) found also a significant positive impact on the proportion of wealth management products and risky financial assets. In the context of risk perception, research by Riepe *et al.* (2022) identified a lower risk aversion for entrepreneurs with lower financial literacy. The difference disappears for entrepreneurs with higher financial literacy.

A higher level of financial literacy seems to be an advantage. However, Zhu (2020) identified certain disadvantages in research focused on adolescents. Adolescents who are too confident in their financial literacy are more likely to engage in risky financial behavior and show a higher level of financial autonomy. Zhu (2020) also identified this type of behavior in adults. Excessive self-confidence can therefore weaken the necessary prudence in decision-making. Kawamura *et al.* (2021) even state that people with high financial literacy tend to take risks and over-indebtedness. These people also take naive financial attitudes and become bold and reckless, but on the other hand, they are more responsible in retirement planning. Gerth *et al.* (2021) also point to the negative connection between excessive self-confidence and financial literacy

in their article examining the contribution of behavioral characteristics to the financial literacy of UAE residents.

The development of financial literacy can also be viewed from the point of view of the cultural, customary and social environment. Razen *et al.* (2021) focused on the level of financial literacy of adolescents in Austria. They state that the level of financial literacy is positively associated with patience, the male gender, and the educational level of the father. At the same time, they found that risky behaviors such as smoking and gambling are positively associated with various measures of risk tolerance and negatively associated with patience. Among other things, their results underline the importance of financial education as a family effort.

Bottazzi & Lusardi (2021) claim that the gender differences in the financial literacy of young people in Italy are large. They identify this fact in all regions of the state, especially in the south and the islands. The role of parental background and especially the role of mothers were identified as a key role in the development of financial knowledge. Bottazzi & Lusardi (2021) state that the social and cultural background of boys and girls and the historical context of the locality are important for gender differences in financial literacy. The authors identified favorable conditions for the transformation of the role of women in society in the original medieval commercial centers and the nuclear family structure.

Okamoto & Komamura (2021) also state the positive effect of financial literacy. In their research, they focused on seniors living in Japan. They identified an increase in financial literacy by age 60. Subsequently, this literacy decreased among the respondents, but self-confidence in decision-making remained high (so-called overconfidence bias). With declining financial literacy, the authors identified a decline in cognitive abilities, beliefs about the benefits of accumulated experience, and stereotypes about better financial literacy of men. The research also identified that men's financial decisions are less thoughtful. However, lower financial literacy for women may be associated with access to adequate education and the amount of financial assets. In any case, as women live to be older, they must have a financial plan in place. Socio-cultural aspects associated with financial literacy are evident in the results of this research.

Kim *et al.* (2021) identified a decline in financial literacy among the senior population in the United States but they also found in this group that more financially educated individuals sought the services of counsellors, which can be described as responsible behavior. However, this behavior does not preclude subsequent inappropriate financial decisions.

Fong *et al.* (2021) identified an understanding of interest rate composition and inflation in a sample of pensioners in Singapore, but only half of the respondents understood the issue of risk diversification. The authors also identified significant problems with the appropriate portfolio allocation, which would correspond to the age of the investors. Respondents with higher financial literacy had a higher tendency to repay credit cards on time, hold stock, and follow an age-appropriate investment glide path in their research.

A number of studies demonstrate the importance of financial literacy and its benefits and risks to respondents living in given social groups. In this context, it is interesting to mention the study by the author's Park & Martin (2021), which states that financial behavior cannot be judged solely on the basis of the influence of financial factors. They state that this is a complex area of how the financial environment interacts with consumers' psychological factors and influences their

decisions. They, therefore, emphasize the need for clear and comprehensible financial services for consumers with low financial literacy. Although increasing financial literacy is important, many financial services are relatively complex and require a more advanced understanding of the issue.

Just as financial aspects affect many aspects, people with higher financial literacy affect their surroundings. This statement can be broken down by the results of several studies. The first is a study from Bangladesh. The variables such as professions, income levels, knowledge of depositing and withdrawing money and knowledge of interest rates have a major impact on overall access to finance and, together with education programs on financial literacy, improve the financial integration of rural regions in developing countries and they help alleviate poverty reduction and prosperity development (Hasan, Le, & Hoque, 2021). However, if we look at a market in which financial literacy is already developed, it is possible to document the study of Jin *et al.* (2021), which examines the relationship between financial literacy and transparency of bank financial reporting on a sample of US banks. They state that the financial literacy of banking institutions' customers can influence the behavior of bank managers in terms of the mechanics of the loan loss provisioning and their opportunistic actions. Their article also states that financially literate customers represent more stable sources of financing, enabling more predictable creation of provisions for credit losses. This situation subsequently contributes to more lasting profits.

In a Swedish study by Anderson & Robinson (2021), the behavior of financially literate and environmentally conscious financial market users can be found. The study states that households with environmental preferences generally do not make green financial decisions due to financial disengagement and information constraints associated with green investment decisions. Households with strong pro-environmental behavior and beliefs are not financially involved and are generally not interested in financial matters. However, if we look at active investors making decisions in their pension portfolios, environmentally oriented investors are more likely to buy mutual funds with pro-environmental names. Within the available information, they give priority to environmental preferences. The availability and manner of providing relevant investment information remain an issue. In this example, it is also possible to identify the impact of financial literacy of environmentally-based individuals on investment decisions and thus on their surroundings.

Fujiki's (2022) research from Japan showed that financial literacy helped to ensure the required social distance during a pandemic through the ability to use non-face-to-face financial services and cashless payments.

The documented examples show that higher financial literacy affects the behavior and decision-making of financial market participants, but at the same time, financially literate participants affect their surroundings and the financial market.

Quality education has its positive effects on the development of society, but it is necessary to observe new phenomena that create further challenges. At the same time, it is necessary to implement new scientific knowledge at the political level and into practice. Petrů, Kramoliš, & Stuchlik (2020) state, among other conditions, that if the state or educational institutions could create truly effective teaching support, the reluctance of many business owners to educate and implement changes in their business could be alleviated. This statement follows their research on small and medium-sized enterprises in the Czech Republic.

3. METHODOLOGY

Methodologically, our research, like all statistical investigations, had two phases. The first phase involved data collection, and the second phase involved data evaluation using methods of mathematical statistics.

A standard procedure for collecting data on financial literacy is a questionnaire survey. Our survey was no exception to this traditional approach. We used the personal finance index (shortly P-FIN index) introduced in Lusardi, Yakoboski, & Oggero (2017) as an instrument to measure financial literacy. We adapted the composition of our questionnaire to cover all eight functional areas of financial literacy defined in the P-FIN index. Specifically, the functional areas of the P-FIN index are determined as:

- earnings, determinants of wages and income,
- consuming, budgeting and spending,
- saving, comprehension of the accumulation factors,
- investing, understanding the types and risks of investments,
- borrowing and debt management,
- risk management, comprehension of the uncertain outcomes,
- insurance and the understanding of coverages,
- accessing and working with information sources.

To test the respondents' abilities in each functional area of financial literacy, we designed the theoretical part of the questionnaire. This part contained 30 questions with multi-choice option responses. Of the possible choices, only one was always correct, and one choice was of the "I don't know" type. We then interpret the P-FIN index as the percentage success rate of the whole test.

In the second part of the questionnaire, we investigated respondents' practical experience with banking and insurance market products. Among banking services, we were interested in both deposit and loan products. Since the use of personal accounts has become standard, we considered respondents who used at least two deposit or investment products to be more experienced. Here we were particularly interested in term deposits, savings accounts, mutual funds, and also building savings. In the area of credit products, we have included mortgage loans, consumer loans, student loans, as well as loans from non-bank entities and instalment sales. Finally, from insurance products, we surveyed experience in life insurance and non-life insurance, in particular liability insurance, car insurance, and property insurance. In the case of credit and insurance products, we divided respondents into two groups based only on whether or not they use a product.

In the second phase, we further analyzed the data obtained from the questionnaire survey using statistical methods. The main tool was the statistical hypothesis testing technique. First, we had to check whether our research samples could be considered samples from a normal distribution. We used the Shapiro-Wilk test to verify normality. The result of this test then influenced the decision to select the appropriate test for comparing results across groups. If the assumption of normality of distribution is rejected, the Kruskal-Wallis test should be used, otherwise, the Welch t-test can be applied.

All numerical calculations were performed in the specialized statistical environment R. All mentioned tests are implemented as functions in this programming language. For this reason, we do not provide a detailed explanation of the test methods used.

4. RESULTS

We performed our survey at two universities in the Czech Republic and Slovakia. Specifically, the University of Žilina in Žilina and AMBIS in Prague. The research targeted students in management fields of study. We distributed 750 questionnaires among the students as part of the survey. After removing incompletely filled answer sheets and maliciously completed answer sheets (all questions answered in with “I don’t know” responses), we obtained 652 questionnaires. The corresponding response rate is 86.93%.

Table 1. Counts and percentages of respondents according to their experience with financial products

	Experience with products		
	Deposits	Loans	Insurance
Count	342	28	134
Percentage	52.45%	4.30%	20.55%

Source: Own elaboration

It showed that 342 respondents use multiple deposit products, while 310 use only a current account. Thus, two numerically balanced groups emerged. There was a significant imbalance when disaggregated by the use of credit products. Here there were only 28 cases that have practical experience with loans. Despite this disproportion, we have compared their test scores here as well. The use of insurance products was reported by 134 respondents, about one-fifth. These counts are summarized in Table 1.

Table 2. Descriptive statistics of the P-Fin scores according to the experience types of the respondents

	Min.	1st Quartile	Median	Mean	3rd Quartile	Max
No deposit experience	0.10	0.40	0.47	0.48	0.56	0.86
Deposit experienced	0.17	0.47	0.53	0.56	0.67	0.97
No loan experience	0.10	0.40	0.53	0.52	0.60	0.97
Loan experienced	0.20	0.52	0.60	0.62	0.74	0.93
No insurance experience	0.10	0.40	0.50	0.50	0.57	0.90
Insurance experienced	0.27	0.50	0.60	0.62	0.75	0.97

Source: Own elaboration

Based on their experience with different types of financial market products, we divided respondents into experienced and inexperienced groups. The basic statistical characteristics of the resulting P-FIN index values are summarized in Table 2. In all indicators, there is a shift towards better results for more experienced respondents. The only exception is the maximum value when broken down by loan experience.

Before proceeding to test the hypothesis of equality of the mean values of the P-FIN index, it is necessary to verify that the results are normally distributed. For this purpose, we performed the Shapiro-Wilk test. To save some space, we report only a summary that in all tests the p-value of the test ranged from $2.2 \cdot 10^{-16}$ to 0.002. This means that we can reject the hypothesis of a normal distribution with high confidence, and we need to use the Kruskal-Wallis test to test for equality of means. Tables 3-5 present the results of tests for equality of average success rates among respondents, broken down by product experience. As we can see from the tables, in all three cases we can reject the hypothesis at a high confidence level. Thus, we can conclude that more experience with financial market products and services leads to higher levels of financial literacy.

Table 3. Results of the Kruskal-Wallis test of equality of the mean percentages for the respondents experienced and inexperienced with the credit products

Credit experience	Mean percentage	chi-squared	p-value
Inexperienced	48.47 %	41.66	1.083·10 ⁻¹⁰
Experienced	56.08 %		

Source: Own elaboration

Table 4. Results of the Kruskal-Wallis test of equality of the mean percentages for the respondents experienced and inexperienced with the loan products

Credit experience	Mean percentage	chi-squared	p-value
Inexperienced	52.03 %	10.007	0.002
Experienced	62.14 %		

Source: Own elaboration

Table 5. Results of the Kruskal-Wallis test of equality of the mean percentages for the respondents experienced and inexperienced with the insurance products

Credit experience	Mean percentage	chi-squared	p-value
Inexperienced	50.01 %	60.095	9.041·10 ⁻¹⁵
Experienced	61.94 %		

Source: Own elaboration

A more detailed look at the structural differences in financial literacy levels can be obtained by testing the average scores achieved in the individual functional areas. Table 6 summarizes the results of the Kruskal-Wallis test for equality of means for each functional area according to the experience of using deposit and savings products. As can be observed from this table, respondents with more experience with deposit and savings products achieve higher levels of financial literacy in all its functional areas. This result is confirmed with a confidence level exceeding 95% in all cases.

Table 6. Results of the Kruskal-Wallis test of equality of the mean percentages in all functional areas for the respondents experienced and inexperienced with the credit products

Functional area	Credit experience	Mean percentage	chi-squared	p-value
Earnings and income	Inexperienced	46.85%	30.416	3.486·10 ⁻⁸
	Experienced	57.97%		
Consuming, and spending	Inexperienced	63.63%	5.3177	0.02111
	Experienced	68.05%		
Savings	Inexperienced	56.61%	8.6659	0.003242
	Experienced	63.74%		
Investing	Inexperienced	37.10%	7.864	0.005043
	Experienced	42.76%		
Debt management	Inexperienced	62.50%	14.993	0.000108
	Experienced	70.18%		
Risk management	Inexperienced	31.53%	6.2859	0.01217
	Experienced	36.11%		
Insurance	Inexperienced	40.73%	42.827	5.981·10 ⁻¹¹
	Experienced	54.09%		
Information sources accessing	Inexperienced	49.19%	4.531	0.03329
	Experienced	55.41%		

Source: Own elaboration

Table 7. Results of the Kruskal-Wallis test of equality of the mean percentages in all functional areas for the respondents experienced and inexperienced with the debt instruments

Functional area	Credit experience	Mean percentage	chi-squared	p-value
Earnings and income	Inexperienced	52.20%	4.8131	0.02824
	Experienced	63.39%		
Consuming, and spending	Inexperienced	65.70%	1.5061	0.2197
	Experienced	71.43%		
Savings	Inexperienced	60.10%	1.323	0.2501
	Experienced	66.07%		
Investing	Inexperienced	39.78%	2.1137	0.146
	Experienced	46.43%		
Debt management	Inexperienced	66.11%	3.9357	0.04727
	Experienced	75.89%		
Risk management	Inexperienced	33.29%	10.94	0.000941
	Experienced	36.11%		
Insurance	Inexperienced	48.21%	14.831	0.000118
	Experienced	66.96%		
Information sources accessing	Inexperienced	52.32%	0.171961	0.6784
	Experienced	55.36%		

Source: Own elaboration

The results in the same structure for respondents grouped by their level of experience with debt instruments are shown in Table 7. Here the situation is not as clear-cut as in the previous case. The hypothesis that the average level of financial literacy is the same can be rejected in only half of the functional areas. Specifically, these are earnings, determinants of wages and income, borrowing and debt management, risk management, comprehension of the uncertain outcomes, insurance and the understanding of coverages.

Finally, Table 8 presents the results according to experience with insurance products. It is clear from the results presented in the table that only in the area of access to information resources the difference in results cannot be considered significant. In all other areas, the null hypothesis can be rejected with a confidence level exceeding 99%.

Table 8. Results of the Kruskal-Wallis test of equality of the mean percentages in all functional areas for the respondents experienced and inexperienced with the insurance

Functional area	Credit experience	Mean percentage	chi-squared	p-value
Earnings and income	Inexperienced	48.99%	52.915	$3.483 \cdot 10^{-13}$
	Experienced	66.98%		
Consuming, and spending	Inexperienced	64.62%	8.3138	0.003934
	Experienced	71.08%		
Savings	Inexperienced	58.49%	9.3412	0.002241
	Experienced	67.53%		
Investing	Inexperienced	38.12%	13.898	0.000193
	Experienced	47.57%		
Debt management	Inexperienced	64.53%	16.766	$4.229 \cdot 10^{-5}$
	Experienced	74.25%		
Risk management	Inexperienced	31.56%	23.672	$1.142 \cdot 10^{-6}$
	Experienced	43.10%		
Insurance	Inexperienced	42.86%	86.611	$2.2 \cdot 10^{-16}$
	Experienced	66.60%		
Information sources accessing	Inexperienced	51.83%	0.74021	0.3896
	Experienced	54.85%		

Source: Own elaboration

5. DISCUSSION

The results of our statistical analysis of the data clearly confirmed a higher percentage of students with a greater range of practical experience with financial sector products and services. This difference was reflected not only in the overall level of financial literacy as measured by the P-FIN index but also in the individual functional areas of financial literacy. This result is not very conclusive due to the small size of the group of respondents having experience with debt instruments. This is due to the low age of the respondents who do not yet have the need to incur debt, for example, to secure their own housing, etc. The fact that they do not tend to finance consumption through debt is also positive. It is also surprising that not a single respondent mentioned the use of student loans. In all cases, these results confirm the validity of our research hypothesis. Based on the findings of our research, we can conduct the following comprehensive discussion.

According to a number of studies (Fong *et al.*, 2021; Kim *et al.*, 2021; van Rooij *et al.*, 2011), financial literacy has a positive effect on responsible financial decision-making. In this research, we approached a sample of respondents by dividing students according to their experience with financial market products. This created a group of respondents with basic practical knowledge and a group of students with advanced knowledge of financial products (inexperienced and experienced group). Full-time and part-time students were mixed. However, both groups have access to the same quality management and economic education.

Based on the findings of this research, it can be agreed that financial literacy has a positive effect on financial decision-making, but at the same time we have identified a significantly higher level of financial literacy among a group of students who have practical experience in the financial market. This group of students was put into a decision-making process, where they had to decide what source of financing they would use, how they would invest money, how they would ensure their lives and health, and how they would lead their company financially and managerially.

In such a situation, the individual is often internally motivated to make the right decision. It is a stronger motivation than simply attending school and gaining a positive assessment. The personal involvement of the individual is relatively high here because, in the case of decision-making in personal finances, a bad decision can be associated with a threat to basic human needs. At the same time, one can also perceive the fact that a financially literate individual subsequently influences his / her surroundings due to his / her acquired knowledge, skills and preferences, as stated e.g. by Hasan, Le, & Hoque (2021) and Jin *et al.* (2021).

The authors of this article identified a similar way of human behavior and decision-making in their research as Zhu (2020), Kawamura *et al.* (2021) and Okamoto & Komamura (2021). Respondents from our research also answered questions that seemed easy in the wrong way. They did not pay them the necessary attention and approached them irresponsibly. Fong *et al.* (2021) and Kim *et al.* (2021) agree that higher financial literacy leads to more responsible financial behavior, but Kim *et al.* (2021) add that this behavior does not preclude subsequent financial decisions. These findings also correspond to the results of our research. Obviously, higher financial literacy will not solve all the problems that modern society faces. Park & Martin (2021) also state that financial behavior cannot be assessed solely based on the influence of financial factors, but the psychological factors of consumers must be taken into account.

Therefore, in the implementation of research, it is important to perceive the broader context of aspects affecting financial literacy. Based on our results, we state the importance of internal motivation of respondents themselves, for whom their life situation drove them to measurably improve financial literacy above the level of respondents at the same level of education, who have not yet needed to use the acquired knowledge in their lives and gain deeper knowledge individually. Other researchers (eg Bottazzi & Lusardi, 2021; Okamoto & Komamura, 2021; Razen *et al.*, 2021) also examine financial literacy in the context of the need to meet the living needs of individuals and their cultural, habitual and social environments. These aspects cannot be overlooked and it is important to work with them in increasing financial literacy, but also in solving other social problems.

At the same time, it is appropriate to draw attention to the need to apply scientific knowledge at the political level and in business practice, which may not use its potential for development, as stated by Petrů, Kramoliš, & Stuchlik (2020). The research from this article and also a number of researches listed in the literature provide valuable knowledge applicable in the management of private and corporate finances.

6. FUTURE RESEARCH DIRECTIONS

The results of the research are important findings in the field of financial literacy development not only for students but also for managers in companies. Effective training leads to the development of competencies and reduction of negative social manifestations, which include a higher percentage of foreclosures, inappropriate financial management of the company leading to stagnation of market value and bankruptcy, fraudulent sales practices, etc. Further research can focus on strong sources of motivation which will affect people's willingness to develop knowledge and skills related to financial literacy.

The findings of some authors (e.g. Kawamura *et al.*, 2021; Okamoto & Komamura, 2021; Park & Martin, 2021; Riepe *et al.*, 2022; Zhu, 2020) can be followed up and deepened for further research, as it is clear that having a community of financially literate individuals is not yet a target state in which social problems are solved. For this reason, it is also appropriate to focus research on identifying the factors of overconfidence that cause wrong decisions of financially literate individuals, as well as on the perception of risk itself, which will enrich the findings in the field of science.

The findings of the article also offer other research directions where it is possible to study the influence of financially literate individuals on their immediate surroundings and on the system as a whole within the countries of Central Europe, which have been involved in the development of financial literacy for several years.

In the context of current developments, it is necessary to perceive that the economies of many countries are declining and, hand in hand with this, the social situation of their inhabitants is deteriorating. Expectations are associated with this situation in the form of an increase in the number of foreclosures, an increase in the debt of individuals and families, a lower ability to save, etc. This leads to the possibility of follow-up research into the application of knowledge and skills in financial literacy in a time of crisis, where it is possible to examine which aspects mitigate the decline in private and corporate finance and which previously positively assessed aspects of financial literacy are failing.

The area of financial literacy is therefore far from exhausted, and the current state of events in society opens up new areas of research. As Ajaz Khan, Çera, & Pinto Alves (2022) stated, there is a need to fully understand the significant factors affecting financial capabilities.

7. CONCLUSION

In this paper, we focused on financial literacy research for students of economics (full-time and part-time - with a wider range of ages) who have access to education that supports the growth of financial literacy. We used the personal finance index (P-FIN index) as an instrument to measure financial literacy and we composed our questionnaire to cover all eight functional areas of financial literacy defined in the P-FIN index. We focused on the relationship between practical experience with financial market products and the level of financial literacy and we divided respondents into experienced and inexperienced groups. Individuals with a practical need to use the services of the financial market privately and/or professionally can be expected to have a deeper internal motivation for education and a practical grasp of our researched issues. We tested the hypothesis: Students with more practical experience with financial market tools and services achieve higher levels of financial literacy.

The results of our statistical analysis of the data clearly confirmed a higher percentage of students with a greater range of practical experience with financial sector products and services. This difference was reflected in the overall level of financial literacy as measured by the P-FIN index and also in the individual functional areas of financial literacy. We found a number of interesting facts. For example, young respondents do not tend to finance consumption through debt which can be perceived as positive. It is also surprising that not a single respondent mentioned the use of student loans.

However, the positive findings are connected with a certain weakness of our research. In the group of respondents having experience with debt instruments is our result not very conclusive due to the small size of this group. It was a group represented by younger respondents who do not yet have the need to incur debt. On the other hand, in all cases, our results confirm the validity of our research hypothesis. Another limitation of the research is associated with turbulent changes in society. The results of our research cannot fit into the period when the effects of rising energy prices, the looming energy crisis and the uncertainty of further economic development are economically apparent. This period will be a test of the practical application of knowledge and understanding of financial literacy in the management of private finances, but also in the adaptation of corporate finance and business economics as a whole to new conditions. E.g. for many family companies, you can find a habitual management style, which, however, does not correspond to the modern needs of financial management and the development of a competitive company.

We discussed the results of our research with the results of a number of current scientific articles, where we found certain similarities in the findings in areas such as risk perception, overconfidence factor, social environment factor, and the responsible approach of financially literate individuals to personal financial management and corporate finance management. These findings and the current economic situation open up further possibilities for follow-up research.

ACKNOWLEDGMENT

The paper was conducted within the project KEGA No 007ŽU-4/2021 Innovative courses to improve financial and economic literacy of the technical fields' students.

REFERENCES

- Ajaz Khan, K., Çera, G., & Pinto Alves, S. R. (2022). Financial Capability as a Function of Financial Literacy, Financial Advice, and Financial Satisfaction. *E+M Ekonomie a Management*, 25(1), 143–160. DOI: 10.15240/tul/001/2022-1-009
- Anderson, A., & Robinson, D. T. (2021). Financial Literacy in the Age of Green Investment. *Review of Finance*. DOI: 10.1093/rof/rfab031
- Bottazzi, L., & Lusardi, A. (2021). Stereotypes in financial literacy: Evidence from PISA. *Journal of Corporate Finance*, 71, 101831. DOI: 10.1016/j.jcorpfin.2020.101831
- Fong, J. H., Koh, B. S. K., Mitchell, O. S., & Rohwedder, S. (2021). Financial literacy and financial decision-making at older ages. *Pacific-Basin Finance Journal*, 65, 101481. DOI: 10.1016/j.pacfin.2020.101481
- Fujiki, H. (2022). Household financial services, financial literacy, and COVID-19 pandemic. *Applied Economics Letters*, 29(7), 615–618. DOI: 10.1080/13504851.2021.1878092
- Gerth, F., Lopez, K., Reddy, K., Ramiah, V., Wallace, D., Muschert, G., ... Jooste, L. (2021). The Behavioural Aspects of Financial Literacy. *Journal of Risk and Financial Management*, 14(9), 395. DOI: 10.3390/jrfm14090395
- Hasan, M., Le, T., & Hoque, A. (2021). How does financial literacy impact on inclusive finance? *Financial Innovation*, 7(1), 40. DOI: 10.1186/s40854-021-00259-9
- Jin, J., Kanagaretnam, K., Liu, Y. I., & Cheng, M. (2021). Does Citizens' Financial Literacy Relate to Bank Financial Reporting Transparency? *European Accounting Review*, 30(5), 887–912. DOI: 10.1080/09638180.2021.1965897
- Kawamura, T., Mori, T., Motonishi, T., & Ogawa, K. (2021). Is Financial Literacy Dangerous? Financial Literacy, Behavioral Factors, and Financial Choices of Households. *Journal of the Japanese and International Economies*, 60, 101131. DOI: 10.1016/j.jjie.2021.101131
- Kim, H. H., Maurer, R., & Mitchell, O. S. (2021). How financial literacy shapes the demand for financial advice at older ages. *The Journal of the Economics of Ageing*, 20, 100329. DOI: 10.1016/j.jjeoa.2021.100329
- Kozubik, A., Kozubíková, Z., & Polák, J. (2019). Financial Literacy of Full-Time and Part-Time University Students. *IJAEDU- International E-Journal of Advances in Education*, 35–43. DOI: 10.18768/ijaedu.478251
- Lusardi, A., Yakoboski, P. J., & Oggero, N. (2017). *The TIAA Institute-GFLEC Personal Finance Index: A New Measure of Financial Literacy*. New York.
- Okamoto, S., & Komamura, K. (2021). Age, gender, and financial literacy in Japan. *PLOS ONE*, 16(11), e0259393. DOI: 10.1371/journal.pone.0259393
- Park, H., & Martin, W. (2021). Effects of risk tolerance, financial literacy, and financial status on retirement planning. *Journal of Financial Services Marketing*. DOI: 10.1057/s41264-021-00123-y
- Petrů, N., Kramoliš, J., & Stuchlik, P. (2020). Marketing tools in the era of digitization and their Use in Practice by Family and other Businesses. *E+M Ekonomie a Management*, 23(1), 199–214. DOI: 10.15240/tul/001/2020-1-014
- Polák, J., Kozubíková, Z., & Kozubík, A. (2018). Financial Literacy of University Students and Effects of Practical Experience. In *Socioint 2018: 5th International Conference on Education, Social Sciences and Humanities* (pp. 17–26). Dubai: International Organization Center of Academic Research.
- Razen, M., Huber, J., Hueber, L., Kirchler, M., & Stefan, M. (2021). Financial literacy, economic preferences, and adolescents' field behavior. *Finance Research Letters*, 40, 101728. DOI: 10.1016/j.frl.2020.101728

- Riepe, J., Rudeloff, M., & Veer, T. (2022). Financial literacy and entrepreneurial risk aversion. *Journal of Small Business Management*, 60(2), 289–308. DOI: 10.1080/00472778.2019.1709380
- Sun, R., Zhang, H., Turvey, C. G., & Xiong, X. (2021). Impact of Financial Literacy on Retirement Financial Portfolio: Evidence from China*. *Asian Economic Journal*, 35(4), 390–412. DOI: 10.1111/asej.12256
- van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. *Journal of Financial Economics*, 101(2), 449–472. DOI: 10.1016/j.jfineco.2011.03.006
- Zhu, A. Y. F. (2020). Financial Literacy Types and Financial Behaviors Among Adolescents: Role of Financial Education. *Journal of Financial Counseling and Planning*, JFCP-19-00051. DOI: 10.1891/JFCP-19-00051

