Universidad Nacional del Comahue

Research Report

Effects of a Brief Financial Education Intervention on the Financial Literacy of University Students

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Abstract

The present study analyzes the impact of an introductory financial education course on university students from non-economic fields of study at the Universidad Nacional del Comahue. The main objective was to evaluate whether a brief training intervention could improve the knowledge levels and financial self-perception of the participants. A quasi-experimental methodology was applied using pre and post-course surveys, employing a quantitative and descriptive approach. The sample consisted of 25 students in the initial evaluation and 22 in the final evaluation, belonging to various areas of study, mostly young people between 18 and 25 years old. The results showed a significant improvement in average scores and an increase in the self-perceived level of financial knowledge. These findings confirm the effectiveness of the course as a basic financial literacy tool, especially in populations with limited prior training in the subject. Likewise, the relevance of incorporating financial education as a transversal component in university education is highlighted, favoring informed decision-making and personal economic planning. Despite the limitations of the sample size, the study provides evidence on the need to promote inclusive and sustainable financial education programs in the academic field.

Keywords: financial education; university students; financial literacy

Introduction

In the contemporary global economy, characterized by its growing dynamism and complexity, financial literacy has consolidated itself as an essential skill for individuals and nations to make effective decisions. Global economic interconnection and digitalization have amplified the relevance of understanding and managing personal finances, making it of utmost importance to have the necessary financial tools. Financial literacy is defined as the possession of knowledge, skills, and a fundamental understanding of personal financial topics, which include managing income and expenses, debt control, saving, investment, budgeting, understanding financial terms, and risk assessment. This capability allows individuals to make more conscious and strategic decisions, which leads to better management of their future financial goals and constitutes the basis of personal, social, and economic financial stability. The COVID-19 pandemic, for example, served as a forceful reminder that most individuals and families are unprepared to face economic shocks, which underlines the prevalence of low levels of financial literacy.

For younger generations, particularly university students, financial literacy acquires even greater importance. As they prepare for post-university life, students face significant financial responsibilities, such as managing savings, investments, debts, and planning for retirement. Academic literature has extensively investigated financial literacy levels, revealing varied results among university students. Numerous studies, including those by Chen and Volpe (1998), Murphy (2005), Kılıç et al. (2015), Çam and Barut (2015), Coşkun (2016), H. Yılmaz and Elmas (2016), Çinko et al. (2017), Öngen and Öngen (2018), and Namlı and Kaya (2019), have concluded that university students present a low level of financial literacy. Others, such as Wagland and Taylor (2009), Özdemir et al. (2015), Dilek et al. (2016), and Sönmez and Kılıç (2020), have reported high levels.

An additional group of investigations, such as those by E. Yılmaz and Aslan (2020), Shambare and Rugimbana (2012), and Kiratoğlu and Kuran (2024), place students' financial literacy at a medium level. Erden (2020), in his study of 362 university students, found that most participants had a medium level of financial literacy, with particular deficiencies in areas such as investment, interest, and mathematical calculations. Regarding the effectiveness of financial education, Johan, Rowlingson, and Appleyard (2020) conducted a study in Indonesia that showed that, although a personal finance course had a positive and statistically significant impact on financial knowledge, it did not show a significant impact on financial attitudes or behavior.

In contrast, Handy, Pontari, Smythe, and Summers (2020) developed a Personal Finance Program (PFP) for senior university students, demonstrating that it improved both financial knowledge and participants' confidence in their financial future, compared to a control group. Salas-Velasco (2022), through a randomized controlled experiment, also found positive treatment effects on both objective financial knowledge and perceived financial self-efficacy (subjective knowledge and self-confidence) of university students. This latter study also highlighted that financial knowledge acts as a partial mediator in the relationship between financial training and financial self-efficacy.

Most research has focused on specific geographical and demographic contexts, mainly in countries like the United Kingdom and the United States, which limits the external validity of the findings to other regions. Salas-Velasco (2022) explicitly underlines the need to extend studies to university students from different academic fields to ensure the external validity of the results, since his own study was limited to final-year students of a business school. This is a vital consideration, given that students in non-economic careers might have less previous exposure to financial concepts, unlike students in economics and administration, who, as Biçer (2016) and Dilek et al. (2016) point out, often show greater financial literacy due to their academic training. Erden's (2020) research, which included students from 36 different departments, advanced the understanding of this diversity. However, it is still necessary to deeply explore the impact of financial education on university populations with diverse academic profiles.

In this context, the present research project proposes to address the identified gaps by evaluating the causal impact of a financial education intervention aimed at university students at the Universidad Nacional del Comahue in careers unrelated to economic sciences. Our main objective is to determine the causal effects of a financial education course on the financial knowledge of these students.

To achieve this purpose, the study will employ a quasi-experimental methodology with pre- and post-course evaluations. This research will not only enrich the empirical evidence base with causal findings in a specific geographical and demographic context, but will also offer invaluable information for the design and implementation of more effective and targeted financial literacy programs in the university setting, supporting the achievement of the Sustainable Development Goals (SDGs) related to reducing inequalities.

Methodology

The present project was developed with a quantitative approach of an exploratory and descriptive nature, aimed at identifying and analyzing basic knowledge about personal finance in students of the Universidad Nacional del Comahue who do not belong to the Faculty of Economics and Administration.

The population of interest was made up of students from various careers (mainly social sciences, humanities, engineering, and health sciences), aged between 18 and 30, of both sexes. The sample included both working and non-working students, which allowed for comparisons based on their real economic experience. Likewise, the level of knowledge in finance that each participant considered possessing (basic, intermediate, or advanced) was investigated, in order to contrast subjective perception with the results obtained in the surveys, carried out in Google Forms, uploaded to the Google Classroom platform. The sample is composed of 22 students who participated in the project from start to finish.

Data collection was carried out in two moments. First, an initial diagnostic survey was applied that allowed the identification of participants' prior knowledge on topics such as budgeting, saving, credit, and investment. Subsequently, after the implementation of an introductory personal finance course, a final survey was administered with the objective of measuring the degree of progress and evaluating the impact of the program.

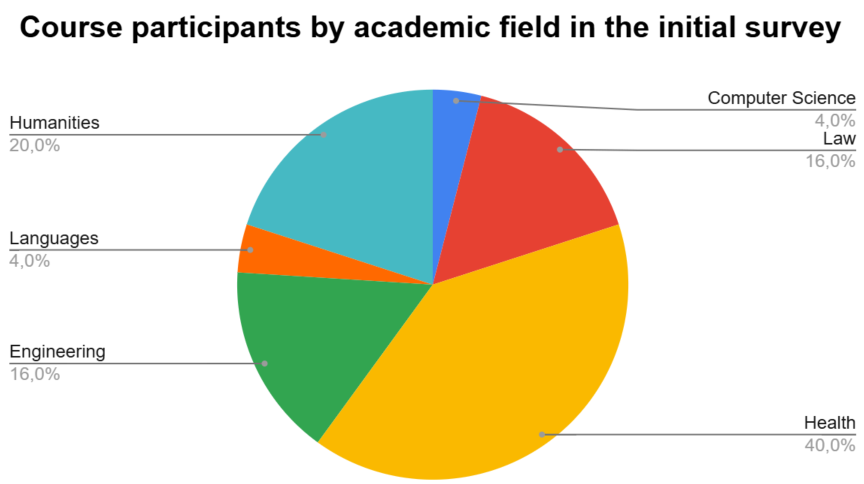
For data analysis, descriptive statistical methods were used, such as the calculation of mean, mode, and frequency distribution, as well as comparative techniques between the initial and final surveys. The working hypothesis proposed was that "participation in a brief basic finance course significantly improves the financial knowledge level of students in non-economic careers".

Results

This section presents the main findings obtained from the analysis of the initial and final surveys applied to the study participants. The purpose of this stage was to recognize the general characteristics of the sample (age, area of study, employment status, and perceived financial knowledge level) and evaluate the evolution of financial learning throughout the training process.

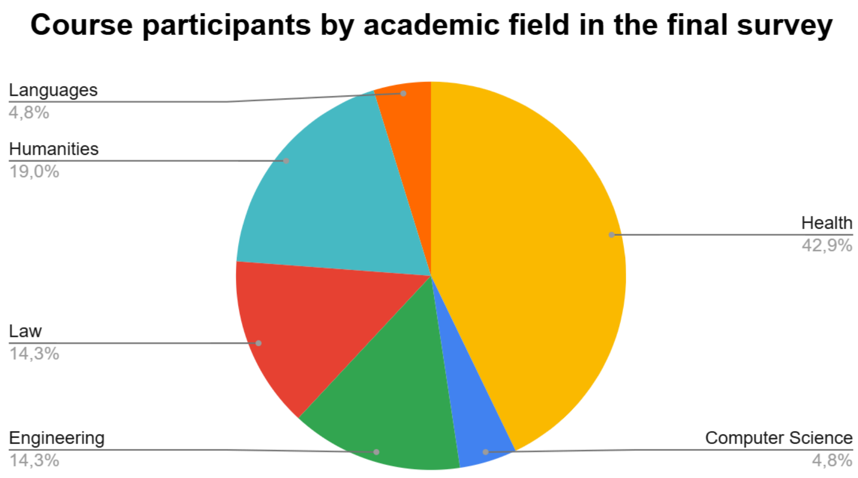
Area of Study

In graph 1, the distribution of participants according to the area of study in the initial survey can be observed. In the initial survey, the total number of participants is 25, of which the majority belong to the Health area (40.0%), followed by Humanities (20.0%), and Engineering and Law (16.0%). Students of Languages and Computer Science are found to a lesser extent. This distribution shows disciplinary diversity, although with a predominance of the health and social fields.



Graph 1

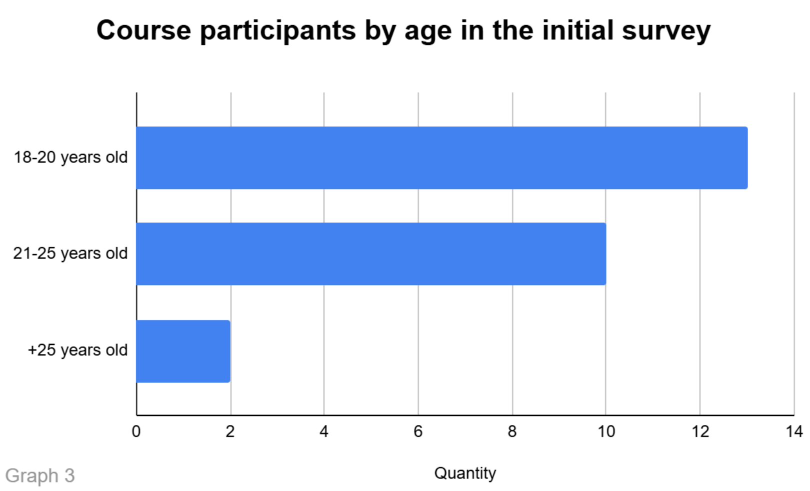
Graph 2 indicates the distribution of participants according to the area of study in the final survey, where the number of participants is 22. The majority belong to the Health area (42.9%), followed by Humanities (19.0%) and Law and Engineering (14.3%). Students of Languages and Computer Science are found to a lesser extent.



Graph 2

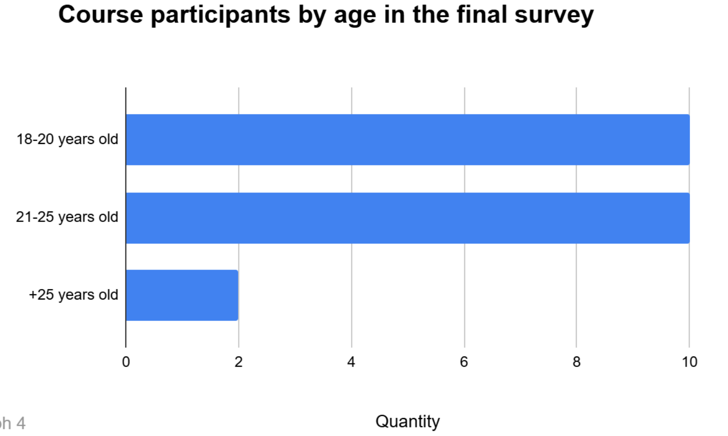
Age Range

Graph 3 illustrates the distribution of participants according to age in the initial survey. The total number of respondents was 25. It can be observed that the majority of participants are between 18 and 20 years old, followed by 21 to 25 years old.



Graph 3

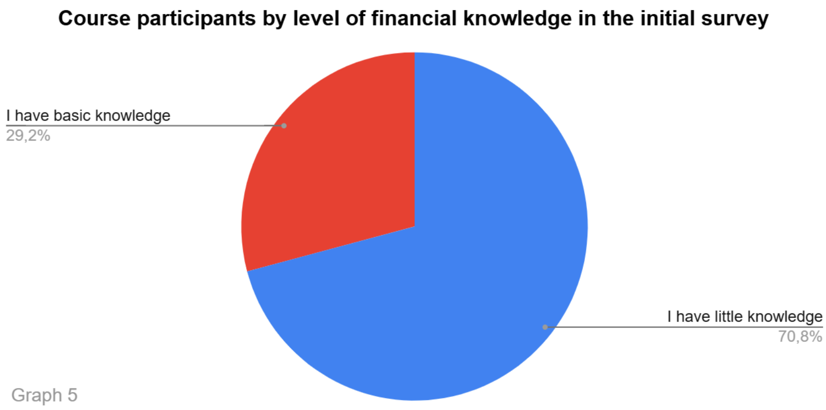
Graph 4 shows the participants according to age in the final survey. The total number of respondents was 22. It is observed that the majority of participants are between 18 and 20 years old, and between 21 and 25 years old, in equal proportion, and only a minimal percentage is over 25 years old.



Graph 4

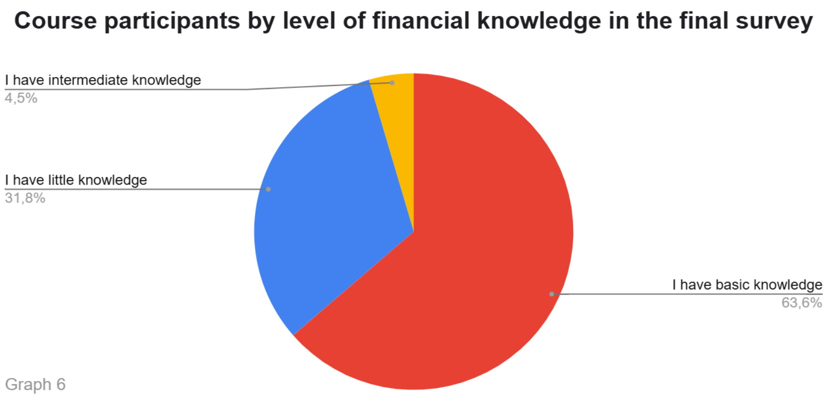
Financial Knowledge Level

Graph 5 shows participants according to financial knowledge in the initial survey. In the initial survey, the results show that 70.8% recognize having little financial knowledge level, while the remaining 28.2% declare a "basic" level.



Graph 5

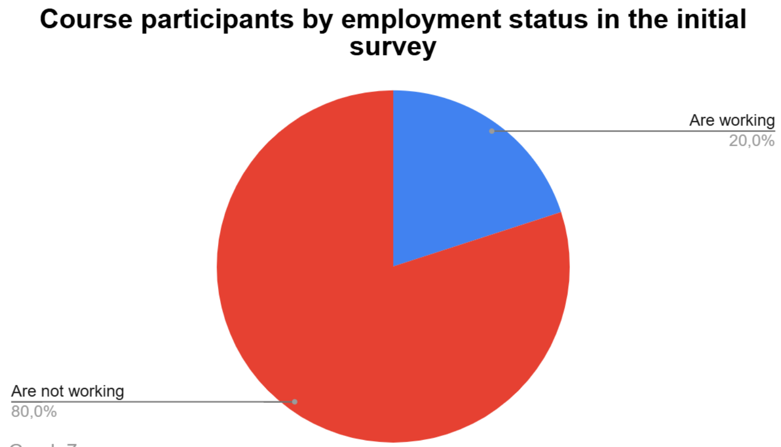
As illustrated in Graph 6, a significant difference was found between the initial and final surveys, showing that 63.6% state they have basic knowledge, while the results for "little knowledge" have decreased to 31.8%, and the rest have an intermediate knowledge level of 4.5%. This indicator was relevant because it was subject to variations as a result of the experience with the course provided.



Graph 6

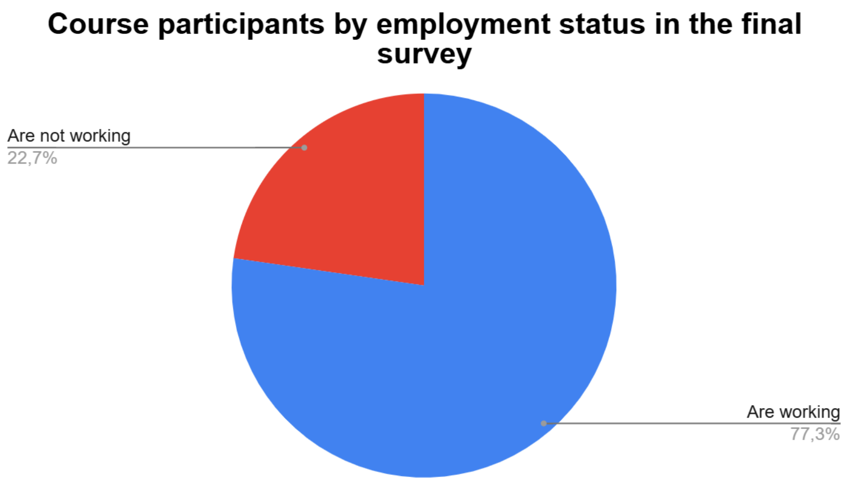
Employment Status

The data in graph 7 indicate that 80% of the respondents are not working, while only 20% declared having employment according to the initial survey of 25 participants.



Graph 7

Graph 8 shows the participants according to employment status in the final survey. The total number of respondents was 22 people. It can be observed that a proportion of 77.3% do not work and 22.7% do. We see that the percentages vary regarding the initial survey due to the new number of people surveyed.

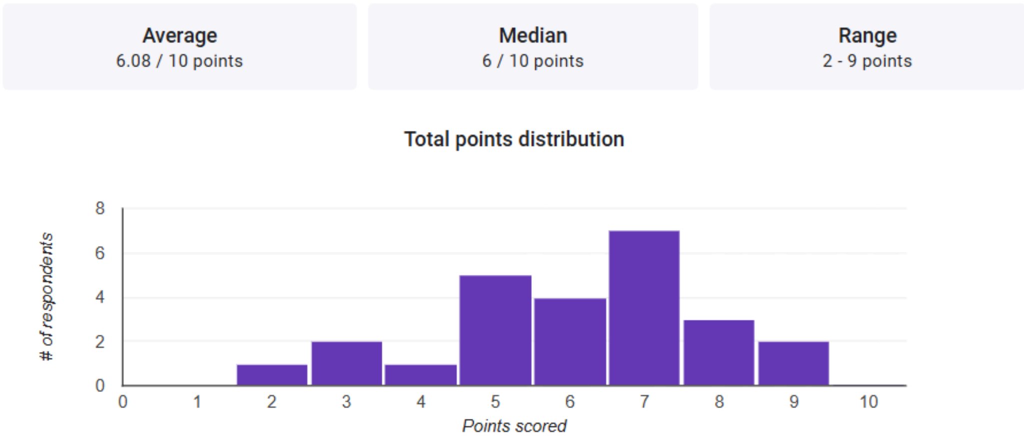


Graph 8

Initial Survey

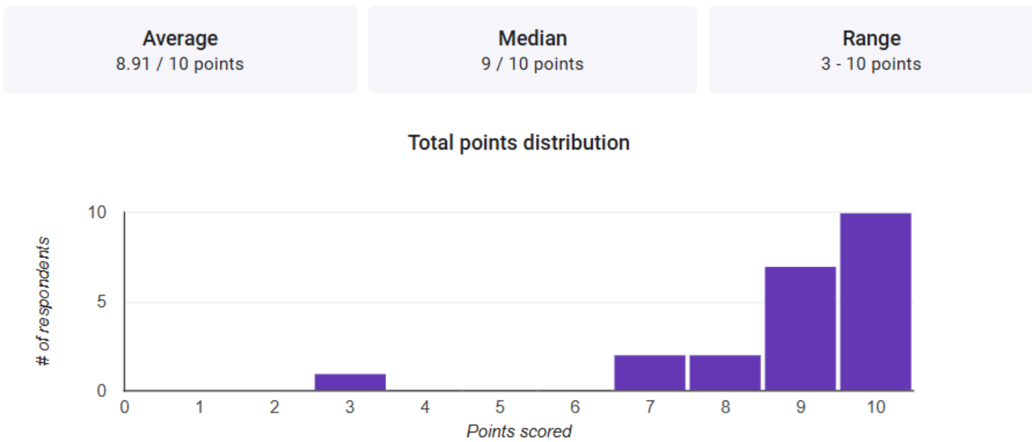
In the diagnostic evaluation, we obtained a total of 25 responses. The average score obtained was 6.08 points out of 10, with a median of 6 points and a range of 2 to 9 points. The questions that registered the highest number of incorrect responses were the following:

- P4. "What is the relationship between risk and return in an investment?" → 11 correct responses out of 25 (11/25).
- P5. "If an investment offers high liquidity, it means that..." → 8/25.
- P8. "The bank spread is:" → 8/25.
- P9. "What is a recommended security measure for your accounts?" → 10/25.
- P10. "What types of loans exist?" → 6/23. These results reflect difficulties in basic and operational financial concepts, especially those related to the risk-return relationship and banking products.



<u>Final Survey</u>

In the final evaluation, we obtained a total of 22 responses. The average score achieved was 8.81 points out of 10, with a median of 9 points and a range of 3 to 10 points. All questions had a high percentage of correct answers; none stood out for having a higher level of error. The distribution of scores shows a shift towards higher values compared to the initial survey, which evidences a general improvement in the level of financial knowledge of the participants.



Discussion

The results obtained reflect a significant improvement in the financial knowledge of the participants after completing the course. The average score increased from 6.08 to 8.81 points, which evidences progress in the understanding of fundamental concepts such as the relationship between risk and return, liquidity, types of loans, and the bank spread. Likewise, the self-perceived level of financial knowledge showed a significant change: before the course, the majority (70.8%) considered themselves to have “little” knowledge, while after the training, 63.6% stated they had a “basic” level or higher. This suggests that the training experience had a positive impact on both objective learning and the students' perception of competence. Regarding the sample profile, young university students between 18 and 25 years old predominate, mainly from the Health area. This context highlights the value of the course as a tool for transversal education applicable to different careers.

Implications

The results highlight the relevance of including financial education in university training, especially in early stages. In a population where nearly 80% are not working, learning concepts such as money management, savings planning, and risk assessment can positively influence future decision-making. Furthermore, the findings reinforce the idea that financial education is not exclusive to economic or business careers but is a basic competence for any citizen. The increase in both objective scores and the self-perception of knowledge demonstrates that brief and well-structured programs can achieve significant advances in financial literacy.

Limitations

Among the main limitations of the study is the small sample size (25 respondents in the initial evaluation and 22 in the final one), which restricts the possibility of generalizing the results to a broader population. Likewise, the evaluation focused on theoretical knowledge and self-perception, without measuring the practical application of the content or changes in financial behavior in the medium or long term. Finally, the loss of three participants between both surveys may introduce a slight selection bias.

Recommendations

It is recommended to expand the sample in future research to include participants from different institutions and educational levels, in order to obtain a more representative view. Likewise, it would be useful to incorporate medium- and long-term follow-up evaluations that allow measuring the permanence of learning. On the practical level, it is suggested to reinforce content related to risk and return, as well as offer complementary workshops on personal budget management and financial planning. Finally, promoting the integration of financial education into university curricula would contribute to forming more conscious students prepared to face real economic challenges.

Conclusion

The present study allowed verification that financial education can generate a positive and significant impact on the financial knowledge levels of university students. The results showed a clear increase in the average scores obtained and an improvement in the self-perception of the financial literacy level, which evidences the effectiveness of the implemented course.

This progress is particularly relevant considering that the participants came from careers unrelated to economic sciences and that, furthermore, a significant proportion are not currently working. In this context, strengthening personal financial competencies acquires a central role in preparing young people for their professional and personal future, allowing them to make more informed decisions regarding topics such as saving, investment, debt, and planning.

Likewise, the research findings reinforce the need to integrate financial education as a transversal component within university academic programs. Personal finance training not only favors individual economic stability but also contributes to social development by fostering a culture of responsibility and financial planning.

Although the sample size and the duration of the study limit the generalization of the results, the data obtained lay the foundation for future research aimed at evaluating the sustainability of learning over time and its practical application in daily life.

In summary, it is concluded that financial education is a key tool for the empowerment of university students, capable of improving their understanding of the economic environment and strengthening their autonomy in decision-making. Promoting this type of initiative from the academic sphere constitutes an essential step towards a more informed, equitable, and financially responsible society.

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