

## REVIEW ARTICLE

# Relevance of financial literacy on poverty reduction in Peru

### ABSTRACT

In Peru, according to the definition of the National Institute of Statistics and Data Processing (INEI, 2023), an individual is considered to be living in poverty if their monthly income is below PEN 415. Poverty decreased considerably from 2011 to 2019. However, after the COVID-19 pandemic, it has significantly increased, to the detriment of all progress made in the previous decade. Even though social welfare programs are a good option to fight poverty, it is necessary for these programs to complement their strategy with financial literacy to improve their effectiveness. This paper evaluates the current situation and the importance of financial literacy for the reduction of poverty in Peru. This research is descriptive, non-experimental and cross-sectional. The results of several studies conducted in various countries revealed that financial literacy is significantly effective to reduce poverty. It can be concluded that, in Peru, it is necessary to conduct more finance training programs in the Ayacucho, Cajamarca, Huánuco and Pasco regions, where the incidence of poverty is above 40%. It is also advisable to evaluate the effectiveness of financial literacy training through O'Connell's five-tier approach (2009).

**Keywords:** Financial literacy; poverty; social welfare programs.

**Roxana Helena Tramontana  
Tocto**

roxana.tramontana@upn.pe

ORCID: <https://orcid.org/0009-0007-3156-4537>

Universidad Privada del Norte,  
Facultad de Negocios, Lima, Perú

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## INTRODUCTION

The proportion of individuals living in poverty decreased significantly from 2011 to 2019. As a result of the COVID-19 pandemic, poverty rose and reached 2010 levels. According to the National Institute of Statistics and Data Processing (INEI, 2023), as of 2022, it has not been possible to return to pre-pandemic figures.

In Peru, poverty is quantified through the spending indicator, obtained from household consumption, which is a measurement of living standards. Thus, the poverty line is defined as the cost of a household market basket, which amounts to PEN 415 per month in the year 2022 (INEI, 2023).

Nationwide, there are several social welfare programs such as Pensión 65, Juntos, Contigo, among others, which provide money transfers to citizens living in poverty. Nevertheless, to strengthen this monetary aid, it is necessary for it to be complemented with financial literacy training, so that individuals with limited financial resources manage their money efficiently.

## AIM OF THE PAPER

This article reviews research studies which detail the benefits of a good level of financial literacy for citizens. The study particularly examines the theoretical foundations and international empirical evidence correlating financial literacy and poverty reduction. The systematic review methodology consisted of finding: i) papers from Google Scholar, Elsevier, Redalyc, Ebsco, Jstor, among other databases, and ii) studies or research related to financial literacy and poverty on the official websites of government entities and international organizations. The inclusion criteria used were: papers and studies not older than 25 years, and English or Spanish as language of publication.

## ARGUMENTATIVE REVIEW

Often, individuals take numerous financial decisions: to follow a budget, to take out a loan, to evaluate and decide on where to invest, to start a business, etc. These decisions have an impact on their quality of life. They are made within a context of strongly interconnected global economies where various financial products and

services of complex characteristics are available, together with various information sources of high and low reliability.

Since these financial decisions are made within a complex and changing environment, it is crucial for citizens to have good financial literacy. These decisions are even more important for individuals with limited financial resources, because the gradual improvement in their quality of life depends upon them.

Generally speaking, financial literacy covers the following aspects: awareness, knowledge, ability, attitude and behavior. They are necessary to be able to take financial decisions to achieve financial well-being, according to the Organization for Economic Cooperation and Development (OECD, 2018). According to this entity, financial literacy consists of three dimensions: financial knowledge, financial attitude, and financial behavior.

The financial knowledge dimension involves three fundamental aspects: ability to carry out calculations with simple and compound interest rates, understanding the concept and consequences of inflation, and understanding risk diversification (Lusardi and Mitchell, 2011). Meanwhile, financial attitude is defined as the mental state, opinions and judgments on financial topics (Pankow, 2021). Attitude is inherent to human beings and may influence financial decisions affecting well-being (Sadek and Imed, 2021). In addition, financial behavior refers to the actions performed by an individual with regard to their personal finances (Kempson *et al.*, 2017); in other words, it comprises any behavior related to financial management such as cash, credit, savings and investment management (Xiao, 2008).

In general terms, individuals with an adequate level of financial literacy display the following advantages:

- **Better retirement planning.** Alessie *et al.* (2011) conducted a multivariate analysis between financial literacy and retirement planning with a sample of 2,010 Dutch citizens below 65 years of age. The authors found a positive causal effect of financial literacy on retirement planning. The study by Clark

*et al.* (2015) links records provided by the Office of Employee Benefits of US Federal Reserve employees to a survey to determine these employees' financial literacy. The authors found that, the higher the financial literacy level, the greater probability to contribute more to the retirement plan.

- **Efficient money management.** The US National Financial Educators Council administered a survey to 3,001 individuals to determine their estimation of how much money they lost in 2022 due to a lack of financial literacy. An average loss of USD 1,819 dollars per individual was recorded (Lach and Nzorubara, 2023). Considering that the US adult population amounts to 245 million individuals, the lack of an adequate level of financial literacy has an estimated cost of USD 436 billion (Lach and Nzorubara, 2023).
- **Better credit management.** A high level of financial literacy is a key factor influencing credit behavior and generating low debt levels in individuals. To illustrate, the participants in a financial literacy survey in Croatia whose results were low showed a worse credit behavior than those whose financial literacy scores were medium or high (Bahovec *et al.*, 2015).
- **Benefits poverty reduction programs.** When financial literacy is included in social projects for poverty reduction in Bolivia and Sri Lanka, the program beneficiaries' behavior is reinforced and favorably changed. This eventually results in an increase in earnings, better management of scarce financial assets, and an effective use of financial products and services (Gray *et al.*, 2009). In addition, it shows that a lack of financial literacy negatively affects poverty reduction programs in South Africa, which is why financial literacy is required to be integrated into these programs (Engelbrecht, 2011). The author also recommends that financial literacy training for vulnera-

ble households is complemented with policies for the promotion of financial institutions and products.

This last advantage is particularly important in the Peruvian context of the last few years, in which poverty has increased significantly. A turning point was 2020, year in which poverty rose to 30.1%, mainly due to the COVID-19 pandemic. This figure is far higher than that of the previous year (20.2%) (INEI, 2023). In 2022, poverty affected 27.5% of Peruvians, a figure higher than last year's (25.9%). Unfortunately, Peru has regressed a decade, since the poverty rate in 2022 is similar to that in the year 2011 (27.8%) (INEI, 2023).

Additionally, in 2022 poverty reached 41.1% of individuals in rural areas and 24.1% in urban areas nationwide. Ayacucho, Cajamarca, Huanuco, Pasco and Puno regions face the greater incidence of poverty with figures above 40% (INEI, 2023).

In such regard, the World Bank (2023) emphasized in a recent study that Peruvian people's vulnerability to entering poverty reached its highest level in 20 years. Therefore, low-income individuals vulnerable to poverty lack adequate mechanisms to face adverse financial scenarios.

Considering the situation described above, it is important to examine the theoretical foundations linking financial literacy and poverty reduction.

The theory of financial capabilities by Ansong *et al.* (2020) maintains that individuals and heads of households can improve their quality of life and well-being if they have adequate financial literacy in an appropriate environment where they can easily access and use financial products and services. Generally speaking, the authors state that individuals with good financial literacy are able to take adequate financial decisions that lead to more efficient consumption and an increase in financial assets and durable goods.

In addition, according to Jacob *et al.* (2000), there are three categories that contribute to individuals' ability to participate in the benefits of economic activity. The first catego-

ry is economic literacy, including the concepts of international trade, the supply-demand interaction, etc. The second is consumer education, which refers to the knowledge of those rights and responsibilities needed to compare prices and take informed purchase decisions. The third is financial literacy, which involves the ability to understand concepts such as saving, budgets, credit, etc. and skilfully put them into practice. The authors state that financial literacy is the most important of these three categories for low-income households living in poverty, because financial literacy directly determines the amount of money they have for spending.

In addition, there is plenty of empirical evidence supporting the notion that financial literacy is key to poverty reduction. The study by Achulo *et al.* (2023) used data from 3,129 surveys by African households from the InterMedia Financial Inclusion Insights program, and used a mathematical model to estimate the association between financial literacy and poverty. The study result indicated that an increase in financial literacy is associated with a 6.9% reduction in poverty. It was thus proved that financial literacy consistently reduced poverty in the three study countries: Tanzania, Kenya, and Uganda. The authors also found that the effect of poverty reduction as a result of an increase in financial literacy is usually greater in rural areas. In addition, including training or instruction in financial literacy in the educational system has long-lasting effects on young people, increasing the effectiveness of poverty reduction in the above-mentioned African countries and other emerging nations.

The study by Cao *et al.* (2022) measured vulnerability to poverty by using the factor analysis method to create a financial literacy index, which includes two dimensions: financial knowledge and financial behavior. Data from the China Household Finance Survey from 345 cities was used. Results show that financial literacy relieves poverty by promoting the participation of households in entrepreneurial activities, commercial insurance, and the choice of lending channels.

The work of Askar *et al.* (2020) used data from a representative nationwide survey in In-

onesia answered by 6,000 individuals from 24 provinces, resulting in a financial literacy index. The results of the econometric model show that the probability of living in poverty decreases by 18% when the financial literacy index increases by a standard deviation. It is thus concluded that financial literacy has a positive and statistically significant impact on the consumption level of individuals.

A crucial proposition by the authors is that poverty reduction efforts both nationally and internationally should focus on improving the financial capabilities of individuals. This can be achieved by including financial literacy in the national curriculum and by means of tailor-made programs. These programs are particularly important in emerging countries, since individuals with little or no financial literacy are mostly found in rural areas.

Meanwhile, in 2019 in Peru, the National Policy of the Multi-sector Commission for Financial Inclusion was created, integrating financial literacy and social welfare program beneficiaries living in poverty or vulnerable to poverty. The aim of this policy, created by the Multi-sector Commission for Financial Inclusion (CMIF by its Spanish initials) is to improve the financial situation of citizens by including specific actions to improve financial literacy, such as Finanzas en el Cole, Finanzas para Ti programs, training for secondary school teachers in Educación Financiera program, and the financial inclusion plans which are part of social welfare programs Contigo, Cuna Más, Juntos, Pensión 65, Qali Warma, among others (CMIF, 2023).

Since its creation in 2007, Finanzas en el Cole program has trained 23,268 teachers and 1.5 million students from all 25 regions in Peru, mainly focusing on Lima, Arequipa, Puno, Ancash and Piura, according to the Superintendency of Banking, Insurance and Pension Fund Administrators (SBS, 2023). In addition, financial literacy training was provided to 13,026 young employees and freelance workers nationwide through Finanzas para Ti program during the first half of 2022 (CMIF, 2023). In the same period, training in financial literacy was provided to 175,665 beneficiaries of Juntos program before they were given their debit cards, and to

133,540 beneficiaries of Pensión 65 program (CMIF, 2023).

Undoubtedly, providing financial literacy training to citizens, especially low-income individuals, results in their better preparation to take optimal decisions, which in turn benefits Peruvian society. It is important to highlight that, unlike welfarist programs which only focus on helping vulnerable populations without promoting their autonomous development, social welfare programs which are complemented with financial literacy training focus on encouraging greater autonomy among their beneficiaries, especially when considering that financial literacy promotes the participation of individuals in entrepreneurship, commercial insurance, and the choice of lending channels, according to Cao *et al.* (2022). It is therefore crucial for this national policy to continue and improve; in the current context in which financial literacy indicators are concerning, especially in the rural areas, where there is a larger proportion of citizens living in poverty as stated by Askar *et al.* (2020).

Indeed, only 13% of citizens nationwide have a high level of financial literacy, while 46% have a medium level, and 41% have a minimal level (Development Bank of Latin America and the Caribbean [CAF] and SBS, 2023). Citizens from rural areas obtain worse results compared to nationwide figures: only 10% show a high level of financial literacy, while 36% have a medium level and 54% have a minimal level (CAF and SBS, 2023).

Out of the three financial literacy dimensions, only financial attitude showed an improvement: individuals with a level greater than minimal rose from 47% in 2019 to 54% in 2022. In addition, for the years studied, the proportion of adults with a level greater than minimal decreased from 37% to 36% in the financial knowledge dimension, and from 44% to 38% in the financial behavior dimension (CAF and SBS, 2023).

## CONCLUSIONS

Generally speaking, citizens have professional and personal goals. As these become fulfilled, they positively impact their well-being, and adequate money management makes it possible

to fulfill these goals. In that regard, financial literacy helps individuals achieve optimal money management, adequate credit management, and better retirement planning. For this reason, it can be concluded that financial literacy is important because it contributes to individual well-being.

Based on the theories by Ansong *et al.* (2020) and Jacob *et al.* (2000), and the empirical research by Engelbrecht (2011), Gary (2015), Achulo *et al.* (2023), Cao *et al.* (2022), and Askar *et al.* (2020), it has been shown that financial literacy has a significant impact on poverty reduction. These results are consistent because the above-mentioned studies obtained an inverse correlation between these variables in various countries (South Africa, Bolivia, Sri Lanka, Kenya, Uganda, China, and Indonesia). Therefore, it is necessary to include financial literacy training for the beneficiaries of social welfare programs for poverty reduction so that these programs become more effective.

Only one of the poorest departments in Peru, Puno, has a greater incidence of Finanzas en el Cole program. Since financial literacy favors poverty reduction, this program should have a stronger presence in other departments with high poverty rates such as Ayacucho, Cajamarca, Huánuco and Pasco. So, citizens from these departments will enjoy more opportunities to gradually improve their situation, especially when considering what is stated by Achulo *et al.* (2023): including financial literacy training in the educational system has long-lasting effects on young people, which makes poverty reduction measures more effective.

Financial literacy consists of three dimensions: financial knowledge, financial attitude, and financial behavior. Only 36% of Peruvians have a level greater than minimal, which means that 64% of Peruvians are unable to calculate the interest rate of a loan or to calculate the final amount after saving money in a financial institution for a period of time. This affects their ability to take sound financial decisions and has a negative impact on their well-being. Therefore, it is imperative that training prioritizes increasing financial knowledge, since this dimension of financial literacy shows the low-

est figures compared to the other two, and is the foundation for optimal saving, investment and financing decisions.

It is highly advisable to evaluate the effectiveness of the training in finance aimed at the beneficiaries of social welfare programs Contigo, Juntos, Pensión 65, among others, by using O'Connell's five-tier approach (2009). Tier 1 determines whether the needs have been covered, based on the participants' results in tests or exams. Tier 2 analyzes the training inputs in terms of their costs, their length and the teaching methods, among others. Tier 3 evaluates adequacy; in other words, the aspects in which the program was effective and those in which it failed, to determine what can be improved. Tier 4 analyzes the microimpact; in other words, the participants' situation before and after the training is compared through surveys and/or tests. Tier 5 examines the macroimpact; this is to say, the national or regional level of financial literacy.

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#### Conflicts of interest

The author has no conflicts of interest to declare.

#### Author contributions

Roxana Helena Tramontana Tocto (lead author): conceptualization, research, supervision, writing (original draft, reviewing, and editing).