

Structural Gaps in Financial Knowledge, Attitude, Practice, and Inclusion among Rural Youth: Evidence from La Maná Canton, Ecuador

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ABSTRACT:

Financial inclusion and literacy are key dimensions of territorial economic development, particularly in rural contexts with structural access constraints. The current investigation assessed the scale of disparities in financial knowledge, attitude, practice, and formal financial inclusion of rural youth in La Maná canton, Cotopaxi, Ecuador, and whether these disparities constitute differences between territories or are a common structural feature. It was a cross-sectional quantitative descriptive comparison with 100 respondents from 5 rural communities. Dimensions were operationalized through normalized composite indices (0–1) with 95% confidence intervals, percentage gaps, and tests for territorial independence (Pearson's χ^2). The results indicate high attitude (78%), intermediate knowledge (47%), moderate to low practice (44%), and limited financial inclusion (30%) and considerable gaps between attitude and practice (34 pp) and attitude and inclusion (48 pp; $p < .001$). No notable differences were observed with respect to territory. Findings imply that the rural youth financial gap cannot be reduced to cognitive deficits, but rather it lies at the balance between favorable dispositions and institutional constraints; therefore, the policies geared towards this group require the integration of financial education components with enablers and formal infrastructure.

Keywords: Financial literacy, Financial inclusion, Rural youth, Attitude-behavior gap, Rural development..

1. Introduction

Financial literacy is a necessary skill enabling informed economic decision-making and successful participation in formal financial systems and defined by the OECD (2020) as the combination of knowledge, attitudes, and behaviors needed for economic well-being across the life cycle. This multidimensional perspective acknowledges that mere information does not lead to sound financial behavior or participation

in formal institutions but that this gap is likely to be widened in the absence of supporting institutional conditions (Chhillar et al., 2025).

Recent literature shows disparities among the components of the Knowledge–Attitude–Practice (KAP) model: among Brazilian youth, financial behavior explains 53.6% of the variance in financial literacy compared to only 11.1% for knowledge (Potrich et al., 2025); attitude moderates the knowledge–behavior relationship

(Mustafa et al., 2023), and self-efficacy acts as a key mediator (Rai et al., 2025). However, converting positive attitudes into effective saving, budgeting, and formal inclusion practices remains limited, a phenomenon described as the attitude–behavior gap (Mireku et al., 2023).

In Latin America, the 2021 Global Findex reports that 41% of adults lacked access to formal financial services (Demirguc-Kunt et al., 2022), a situation worsened in rural areas by infrastructure limitations and by high youth informality (63.4% among those aged 15–24), which reduces eligibility for formal financial products (Economic Commission for Latin America and the Caribbean, 2023). Although the KAP model has been used to identify breaks between knowledge, attitude, and practice (Mani, 2021), in rural areas formal inclusion cannot be treated only as an external outcome, but as an observable manifestation of financial behaviour conditioned by access constraints. Yet there remains a void that remains in this region in what is presumed to be their overall estimation of the four dimensions: simultaneously; and how do we statistically assess whether the observed gaps are due to territorial heterogeneity, or to a generic structural pattern (Czech et al., 2024).

The objective of this study is to assess the extent to which the gap between financial knowledge, attitude, practice and inclusion is large among rural youth in five communities in La Maná canton and to see if the differences, as measured by independence tests Pearson's χ^2 , either respond to territorial variation or demonstrate a homogeneous structural characteristic.

2. Methodology

Design

It adopted quantitative, descriptive-comparative, and cross-sectional design based on the Knowledge–Attitude–Practice (KAP) model at cross-sectional level, with formal financial inclusion as the dimension expanded on. The research concentrated on estimating the descriptive size of the gaps, and assessing their independence from the territorial variable, without any causal modeling or population inference outside of the research setting (Creswell

& Creswell, 2017; Hernández-Sampieri & Mendoza, 2020).

Participants/Sample

The target population was young people, with a rural setting in La Maná canton, Cotopaxi province, Ecuador. The study sample included 100 subjects from five rural areas, each of which got 20 samples using non-probabilistic convenience sampling techniques. Territorial contrast variable: community of origin.

Instruments

Data were collected in the form of a structured nine-item questionnaire on three items per dimension—knowledge, attitude, and practice—and one operational indicator for financial inclusion. Responses were coded, respectively, on binary and ordinal scales, normalized to a 0–1 scale, and the item “Prepares a monthly budget” was recoded on a trichotomous scale (0 = never, 0.5 = sometimes, 1 = always).

Procedure

Participation was voluntary and anonymous. Participants were informed about the purpose of the study and provided informed consent prior to completing the questionnaire; no personally identifying data were collected, and information processing was done aggregately and in a confidential manner according to ethical principles for research involving human participants in social science.

Data Analysis

Each dimension was operationalized through an aggregate index, calculated as the simple average of normalized items, following standard methodologies for composite indicators (OECD & Joint Research Centre, 2008). 95% confidence intervals were estimated using a binomial approximation, and gaps between dimensions were expressed as percentage differences with their respective intervals. Pearson's χ^2 test was used to determine the independence between dimensions and the territorial factor combined with Cramér's V to evaluate effect sizes. IBM SPSS Statistics 22 was used for statistical processing.

3. Results

The sample was 100 individuals from five rural settings; the female majority (59%) and young (aged 18–25) was common among participants. Educational levels of technical education were largely present (78%), evidence of the canton's technical and technological education provision –

albeit this does not translate into structured financial education content; thus, explaining the fact that 47% of the surveyed participants possessed intermediate knowledge. Forty-one percent of the participants preferred in-person workshops for financial education, with online courses (31%) and printed materials (28%) in a second position.

Table 1: Sociodemographic characteristics of the studied rural population (N = 100)

Variable	Category	n	%
Sex	Female	59	59.0
	Male	41	41.0
Age	18–25	55	55.0
	26–35	31	31.0
	36 or older	14	14.0
Education level	Technical	78	78.0
	Secondary	14	14.0
	Other (primary/higher)	8	8.0
Main occupation	Student	46	46.0
	Farmer	28	28.0
	Employee	23	23.0
	Unemployed	3	3.0

Figure 1 presents the composite indices with their 95% confidence intervals. Attitude toward financial education recorded the highest value (78%; 95% CI: 69.88–86.12), followed by

knowledge (47%; 95% CI: 37.22–56.78) and practice (44%; 95% CI: 34.27–53.73); formal financial inclusion showed the lowest value (30%; 95% CI: 21.02–38.98).

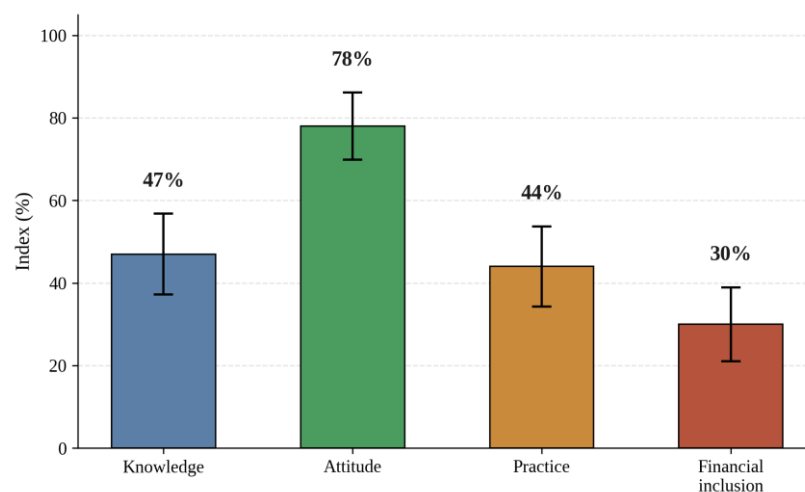


Figure 1. Composite indices of knowledge, attitude, practice, and financial inclusion with 95% confidence intervals (N = 100)

Table 2 summarizes the structural gaps between dimensions. Significant differences were found between attitude and knowledge (31 pp; 95% CI: 18.3–43.7; $p < .001$), between attitude and practice (34 pp; 95% CI: 21.3–46.7; $p < .001$), and the largest gap was recorded between attitude and financial inclusion (48 pp; 95% CI: 35.9–60.1; p

$< .001$). The comparison between institutional trust and formal inclusion showed an additional gap of 36 pp (95% CI: 23.1–48.9; $p < .001$), confirming a structural mismatch between attitudinal disposition and observable financial behavior.

Table 2: Structural gaps between KAP model dimensions and financial inclusion (N = 100)

Comparison	Difference (pp)	95% CI of diff.	z	p
Attitude vs. Knowledge	31	18.3 – 43.7	4.50	< .001
Attitude vs. Practice	34	21.3 – 46.7	4.90	< .001
Attitude vs. Financial inclusion	48	35.9 – 60.1	6.93	< .001
Institutional trust vs. Formal inclusion	36	23.1 – 48.9	5.12	< .001

Pearson's χ^2 tests between community of origin and the KAP model items showed no statistically significant associations ($p > .05$ in all cases; Cramér's V between 0.076 and 0.259), indicating a homogeneous distribution of the gaps across the five communities. Two items ("Wants financial training" and "Prepares a monthly budget") had expected frequencies below five in 50% of their cells, so their results should be interpreted with caution; future studies with larger samples should apply Fisher's exact test in these cases.

4. Discussion

The disconnect between positive attitudes regarding financial education and effective saving behaviors and budgeting also echoes recent efforts to demystify the constraints of translating intention to financial behavior in environments of economic vulnerability (OECD, 2020; World Bank, 2022; Klapper & Lusardi, 2020). A possible ceiling effect, rooted in the dynamics of social desirability, can manifest through the attitudinal item, and as such, the variance in real-life behavior from this point on should be construed critically. And it is also relevant in behavioral economics which indicates that its disconnection was the result of intertemporally biased decision making in constrained circumstances where a liquidity crunch has the tendency to inhibit your capacity to plan, even during saving (Carvalho et

al., 2016; Haushofer & Salicath, 2023), while in behavioral public policy, too it is indicated that informing people does not appear to directly impact planning, unless decision making tools are introduced to implement it (Benartzi et al., 2017).

The low level of financial inclusion noted reinforces the view that the attitude–practice gap is mediated by the institutional context peculiar to the rural setting: access to financial services depends not only on individual preferences but also on infrastructure, intermediation costs, and institutional density (Akande et al., 2023). The low level of inclusion observed cannot be understood solely as a function of individual choices, but as an indication of an environment that obstructs the possibility of converting favorable dispositions into formal financial behaviors; without enabling mechanisms, financial education is practically limited in its reach.

The lack of significant differences among communities highlights the fact that identified gaps do not seem to respond to localized dynamics, but to the collective experience across the territory – a similar pattern found in the literature on subnational inequality: in regions with low institutional density, limitations tend to reproduce homogeneously across localities with similar conditions (Rodríguez-Pose, 2020; Gallego-Losada et al., 2024). This homogeneity

should not be a sign of positive convergence but rather, evidence of transversal constraints persistence – implying that interventions targeted at the community-level may be inadequate unless the drivers of transversal conditions at region-level are addressed. The research contributes to the KAP literature by introducing formal financial inclusion as an analytic dimension in a manner congruent with the development of the concept of financial literacy as financial capability: the combination of individual skills and effective institutional opportunities (Johnson & Sherraden, 2007; Mani, 2021). Within this framework, financial behaviors arise from an interaction between agency and environment and do not emerge through isolated cognitive dispositions.

Cross-sectional design and non-probabilistic convenience sampling precludes statistical generalization to other communities, and self-report may contribute to social desirability bias. The community sample size per community ($n = 20$) also reflects a limitation of statistical power of territorial independence tests suggesting future

measures might consider probabilistic samples, longitudinal designs, and Fisher's exact tests for items with low-frequency cells.

5. Conclusion

This study shows that favorable attitudes towards financial education among rural youth in La Maná canton are accompanied by poor adoption of saving and budgeting practices. Such a gap should not only be viewed as an individual cognitive deficit but rather the consequence of institutional and economic factors limiting the ability to act; the low formal financial inclusion level confirms that infrastructure and enabling mechanisms are crucial for converting favorable dispositions into responsible financial behavior. The lack of significant differences among communities reflects the nature of these limitations operating transversally across the territory, forming a shared structural pattern. Therefore, rural youth-oriented programs should combine the elements of financial education with the investment in infrastructure and digital systems tailored to the region with a coordinated regional approach and not a focus only on knowledge dissemination.

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Author Declaration

This manuscript is original and has not been submitted elsewhere for publication. The authors report no conflicts of interest. Participants took part voluntarily and anonymously, after being informed of the study's purpose and giving their consent prior to data collection.