

Profiles of Financial Behavior Among University Students in Two Latin American Countries

Perfiles de comportamiento financiero en universitarios de dos países latinoamericanos

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Abstract

Objective: to identify how university students from two Latin American countries Mexico and Peru cluster according to their everyday relationship with money, blending what they know, how they feel about financial matters, and the actions they actually take. Methodology: quantitative, cross-sectional design was applied to a sample of 463 students using a three-dimension scale covering financial knowledge, attitudes, and behavioral practices. Cluster techniques were carried out, beginning with a hierarchical approach and later refined through K-Means to improve the classification. Results: three clearly distinguishable profiles: one marked by limited financial understanding and modest habits, another characterized by stronger conceptual mastery and more rational decision-making, and a third group showing a notably positive attitude despite having weaker knowledge. Limitations: Even so, the results suggest that young adults do not form a uniform group and that their profiles can guide educational efforts, institutional strategies, and public policies that are more finely tuned to the realities they face. Conclusions: statistical comparisons confirmed that these differences are not random, especially within cognitive and attitudinal dimensions

Keywords: Behavior, Profiles, University, Cluster.

JEL Codes: A20, D14, I22, C38

Resumen

Objetivo: identificar cómo se agrupan los universitarios de dos países latinoamericanos, México y Perú, según su relación cotidiana con el dinero, mezclando lo que saben, lo que sienten y lo que finalmente hacen. Metodología: enfoque cuantitativo y diseño transversal aplicado a 463 estudiantes, empleando una escala de tres dimensiones: conocimiento, actitud y prácticas financieras para aplicar técnicas de conglomerados que permitieron observar patrones diferenciados; primero con un análisis jerárquico y luego con K-Means para afinar la clasificación. Resultados: tres perfiles bien definidos: uno con baja comprensión financiera y hábitos limitados, otro con dominio conceptual y decisiones más racionales, y un tercero que combina actitud positiva con conocimientos aún débiles. Limitaciones: los hallazgos sugieren que los jóvenes no forman un grupo homogéneo y que sus perfiles pueden orientar intervenciones educativas, acciones institucionales y políticas públicas más precisas y sensibles a las realidades

que enfrentan. Conclusiones: las comparaciones estadísticas confirmaron que estas diferencias no son aleatorias, especialmente en las dimensiones cognitivas y actitudinales.

Palabras claves: Comportamiento, Perfiles, Universidad, Conglomerado.

Códigos JEL: A20, D14, I22, C38

1. Introduction

The relationship between young people and money is not merely a matter of numbers; it is a combination of habits, opportunities, uncertainties, and learning processes—some explicit, others inherited. This mixture is clearly present in universities: students who are learning to manage their first paycheck, others who combine scholarships with part-time jobs, and many who handle credit and savings largely by intuition. The interest in understanding how these young people think and behave financially does not arise by chance. The complexity of the contemporary financial system requires that even “small” decisions be approached carefully, as they accumulate effects in the medium term. This is particularly relevant in Latin America, where institutional heterogeneity and economic volatility challenge any supposedly universal manual of financial behavior (OECD, 2013).

It is common in the literature to encounter two recurring ideas: financial literacy matters, yet knowledge does not always translate into better financial practices. Annas Lusardi articulated this clearly through both theory and evidence, arguing that financial education functions as a form of human capital that facilitates decision-making, but whose real impact depends on multiple mediating factors surrounding the individual (Lusardi, 2014). This tension motivates a closer examination of university students: it is not enough to measure what they know; it is necessary to understand how they act, when they act, and why they sometimes disregard what they know in favor of emotional or social shortcuts.

At the same time, the region presents distinctive characteristics. International reports and tools have begun to acknowledge Latin America’s diversity, ranging from measurement exercises coordinated by global networks to national studies showing varying levels of financial inclusion, saving behavior, and

financial resilience (OECD/INFE, 2023). In some countries, the primary challenge is inclusion—enabling young people to access formal financial products without falling into over-indebtedness. In others, the main issue lies in a weak savings culture or confusion surrounding increasingly sophisticated instruments (such as credit cards with installment plans, investment apps, or microloans). For this reason, a comparative approach between two Latin American countries offers more than contrast; it allows for the identification of shared patterns as well as local conditions that explain divergences in financial behavior.

This study does not seek a single “ideal” financial student profile; rather, it aims to understand plurality. From this premise, the research focuses on identifying groupings that share common traits in financial attitudes, habits, and beliefs. Some groupings are easy to anticipate: the methodical saver, the impulsive consumer, the digitally savvy financial user. Others emerge only through data analysis: individuals who know how to calculate interest rates but rely more on family recommendations than on online reviews, or those who prioritize present consumption over future planning, possibly due to immediate economic constraints. It is precisely this interplay between knowledge and behavior that must be captured through well-designed instruments and, above all, interpreted with sensitivity to context (Ergün, 2017).

There is a practical motivation underlying this theoretical interest. Universities and policymakers require evidence-based inputs that allow for meaningful intervention. The goal is not to offer generic courses on “saving,” but to tailor actions to specific profiles. A financial education module will differ substantially if most students exhibit “conservative prudence” toward money rather than impulsive behavior driven by promotions and easy credit. Moreover, financial markets are changing rapidly: digital platforms, installment payment options, and targeted advertising are reshaping young people’s decision-making pathways. Recent international measurement data confirm that while knowledge levels may improve through interventions, translating knowledge into practice requires integrated strategies that consider incentives, product design, and the pedagogy of financial education itself (OECD/INFE, 2023; AFL, 2024).

One aspect often underestimated is the influence of the university environment. A student's field of study, income expectations, peer spending culture, and even the structure of academic support systems shape economic choices. Regional studies have shown that variables such as academic discipline or entrepreneurial experience affect students' financial behavior, complicating the simplistic relationship between knowledge and action (González-Núñez, 2024). Consequently, any attempt at profiling must go beyond test scores and include sociodemographic variables, consumption habits, use of financial services, and perceptions of risk and the future.

Another important consideration is that profiling is not merely a descriptive exercise. When profiles are translated into concrete strategies—such as communication campaigns, practical modules, or personalized financial counseling—the likelihood of impact increases. For instance, a student with high affinity for digital banking may benefit from interventions delivered through apps and notifications, whereas someone who distrusts formal banking may require approaches based on interpersonal trust and in-person services. Practical evidence supports this view: interventions that align format, message, and audience tend to be more effective than uniform approaches (AFI, 2024; Lusardi, 2014).

Finally, there are ethical and social reasons that justify this research. University students constitute future human capital, and their financial well-being has implications for their academic, emotional, and professional lives. Cross-country variations not only enrich academic analysis but also inform local policymaking. Understanding financial behavior profiles helps design not only educational courses but also responsible financial products, strategies to prevent over-indebtedness, and support programs that foster economic autonomy. In short, understanding how young people comprehend, decide, and act with respect to money is a necessary step toward forming more financially resilient citizens and professionals.

2. Literature Review

Discussing the financial behavior of university students entails entering a domain where inherited habits, almost intuitive economic beliefs, and, at times, uncertainty toward a financial system that

evolves faster than individuals can assimilate, coexist. In Latin America, this perception is intensified by long-standing inequalities, recurrent inflationary cycles, and uneven access to formal financial products. Consequently, when attempting to explain why young people make markedly different financial decisions, the literature tends to oscillate between traditional rational-choice models and more recent approaches that acknowledge the role of bias, impulsivity, and limited information (Lusardi, 2019). Recent studies published in indexed journals have reinforced this theoretical shift, demonstrating that young people's financial behavior is mediated by cognitive and contextual constraints that challenge the notion of fully rational agents—particularly in emerging economies, where uncertainty is structural rather than episodic (Fernandes et al., 2019; Strömbäck et al., 2017).

Financial literacy, often presented as a “solution,” proves to be far less linear than commonly assumed. Numerous studies—most notably those by Lusardi and Mitchell—have consistently shown that basic financial knowledge predicts certain behaviors, but not all of them (Lusardi & Mitchell, 2014). As evidence from Latin America accumulates, it becomes increasingly clear that knowledge does not guarantee action. Many young people understand the concept of planned saving yet still prioritize immediate consumption; others rely heavily on digital financial tools without fully grasping the risks associated with easy credit access. At this point, several investigations emphasize the influence of cultural and family factors, highlighting that the household remains a more powerful educational agent than formal instruction alone (OECD/INFE, 2023).

Recent empirical studies conducted in Latin American contexts reveal pronounced gaps in financial literacy levels among university students, reflected not only in conceptual understanding but also in concrete practices such as budgeting and personal financial planning. A quantitative study carried out among students at the Universidad Veracruzana in Mexico found that a significant proportion of young people experience irregular access to financial information and high economic dependence on their families. These conditions limit both their motivation and their ability to adopt responsible financial behaviors, such as systematic saving or medium-term expense

planning (Oliveras & Vázquez, 2025). Such findings suggest that financial literacy alone is insufficient to promote effective practices unless it is accompanied by continuous educational strategies formally integrated into the university curriculum.

A relevant line of research in Latin America has focused on the development and validation of financial literacy measurement instruments adapted to the sociocultural contexts of the region. Within this framework, the Financial Literacy for Key Decisions (FLKD) scale was evaluated through confirmatory analyses using samples of young adults from several Latin American countries, including Mexico, Colombia, and Uruguay. The results indicate that while the scale demonstrates adequate levels of reliability and validity, its application reveals significant differences in how students understand and apply essential financial concepts, underscoring the influence of educational and cultural contexts on the measurement of the construct (Décaro et al., 2024). This evidence supports the need to adapt research instruments to regional particularities in order to avoid oversimplified interpretations of financial behavior.

In the Colombian context, studies conducted with university students in business and administration programs have identified multiple factors influencing both financial literacy levels and their translation into observable behaviors. Beyond formal knowledge, socioeconomic and educational variables play a decisive role in shaping students' financial behavior (Caballero et al., 2022). These findings help explain why students with similar levels of financial knowledge may display substantial differences in their ability to convert that knowledge into effective financial practices, as their decisions are mediated by contextual conditions and differentiated educational trajectories.

Importantly, the literature does not converge on a single explanatory model. Some authors prioritize cognitive factors, particularly the ability to plan over extended time horizons. Others emphasize socioeconomic variables such as household income or prior exposure to formal banking. More recently, studies have incorporated emotional components, including financial anxiety, perceived control, and fear of indebtedness. These layers do not operate independently; rather, they overlap, suggesting that financial profiles are multidimensional constructions rather than static categories

(González-Núñez, 2024). Comparative studies across countries reinforce this idea, as structural differences simultaneously shape what students know and what they ultimately do. From this perspective, financial behavior is understood as a dynamic trajectory influenced by both objective resources and subjective interpretive frameworks, leading to the proposal of integrative models that combine financial literacy, psychosocial variables, and institutional context (Strömbäck et al., 2017; Xiao & O'Neill, 2018).

Another useful concept for understanding these profiles is that of "responsible financial behavior," a broad yet recurrent notion in the literature. Some studies define it in terms of predictable decisions such as saving, paying on time, and avoiding unnecessary credit. Others argue that responsibility does not always align with traditionally valued behaviors; in contexts of economic uncertainty, actions that appear risky may instead reflect attempts to compensate for unstable income streams (AFI, 2024). Consequently, the literature suggests that financial behavior must be interpreted cautiously, recognizing that students make decisions within highly specific economic and cultural environments. Recent Latin American studies warn that applying normative definitions of financial responsibility without accounting for youth labor informality or weak social protection systems can lead to biased diagnoses and ineffective interventions (Klapper & Lusardi, 2020).

As recent studies are reviewed, a growing tendency toward profiling and segmentation becomes evident. Classifying students according to financial styles has emerged as an analytical tool to capture the diversity of financial trajectories. These profiles help explain why students of similar age and educational level behave so differently. Interestingly, some studies show that students with higher levels of conceptual knowledge do not necessarily exhibit the most stable financial practices; in some cases, the "informed" student assumes greater risks precisely because they believe they understand them. This introduces an additional nuance: overconfidence—a phenomenon previously documented among adult investors—now observed among university students as well (Ergün, 2017). Incorporating this bias has enriched theoretical analysis by demonstrating that financial knowledge may, in certain contexts, amplify risk-taking rather than mitigate it, particularly when not accompanied by emotional self-regulation skills (Fernandes et al., 2019).

When the literature incorporates cross-national comparisons within Latin America, heterogeneity becomes even more apparent. In countries with highly digitalized financial systems, young people interact with tools that encourage immediacy; in others, low institutional trust fosters a preference for cash transactions and reliance on family advice. For this reason, binational and multinational studies are especially valuable, as they allow researchers to distinguish which components of financial behavior stem from personal characteristics and which are shaped by regulatory and cultural contexts. In many analyses, these differences are reflected not only in practices but also in perceptions of risk, future outlook, and the meaning of “financial success.”

Comparative evidence suggests that these perceptions function as interpretive filters that condition the adoption of financial behaviors, reinforcing the need for situated regional analyses rather than uncritical global generalizations (OECD/INFE, 2023; Klapper & Lusardi, 2020).

Finally, a theme that emerges consistently across the literature is the urgency of developing valid instruments capable of capturing these profiles accurately. Without robust measurement tools, diagnoses risk being incomplete—or worse, misleading. International assessments such as those conducted by OECD/INFE have broadened the methodological landscape, yet there remains a pressing need to adapt scales to regional, cultural, and economic specificities. This underscores the importance of studies that integrate theory, measurement, and comparative analysis to more precisely describe how university students across Latin American countries develop their financial styles—whether by conviction, habit, or economic necessity.

This methodological challenge has been repeatedly emphasized in recent academic literature, which advocates for context-sensitive instruments and analytical models that integrate financial behavior, financial well-being, and structural conditions (Xiao & O’Neill, 2018; González, 2024).

3. Methodology

The research was structured under a quantitative approach, although its development was not as linear as is often described in methodological

manuals. Throughout the process, adjustments were made that responded more to the particular characteristics of the participants than to a rigid script. The study began with the idea of examining how certain patterns of financial behavior are configured among university students from Mexico—Universidad de Sonora and Universidad Estatal de Sonora—and from Peru—Universidad Tecnológica del Perú. Therefore, a cross-sectional design was chosen, capable of capturing differences present at the time of measurement, without attempting to follow students over time.

To construct the instrument, previous scales on financial literacy and financial behavior were reviewed, selecting items that could be easily understood by young people enrolled in degree programs within the economic-administrative area. Instead of adopting a complete questionnaire, an adapted version was developed with three dimensions: financial knowledge, attitudes toward finances, and everyday money management practices. Responses were organized using a four-point Likert scale. During the pilot stage, difficulties were detected in some technically worded items, so several statements were reformulated in order to maintain clarity without losing conceptual rigor.

The final sample included students over 18 years of age enrolled in university programs within the economic-administrative field in both Latin American countries. The total database size of 463 cases resulted more from the availability of complete groups than from an exact sample size calculation. Voluntary participation and anonymous completion of the questionnaires were ensured, using both physical and digital formats, depending on the possibilities of each institution.

Once the data were integrated, a data-cleaning process was carried out to eliminate duplicate records or inconsistent responses. No missing values of relevant magnitude were observed, so it was not necessary to apply statistical imputation. Variable coding was maintained exactly as originally answered, avoiding recategorization of the scales in order to preserve the sensitivity of the measurements.

The analysis was divided into two phases. The first consisted of a descriptive exploration of the three dimensions, with the purpose of examining data distribution and variability. Basic assumptions were evaluated, such as dispersion within each variable,

homogeneity of responses, and the presence of potentially problematic outliers. This preliminary inspection was used to determine whether it was appropriate to proceed toward more precise segmentation.

The second phase focused on identifying profiles through cluster analysis techniques. Initially, a hierarchical approach was applied using Ward's method and squared Euclidean distance to explore the natural structure of the data. This approach made it possible to detect potential initial groupings without imposing a predetermined number of clusters. Subsequently, the K-Means algorithm was used to refine this classification, iteratively adjusting the assignment of students to groups. This combined procedure provided a more robust view of the overall pattern of similarities and differences among participants.

Finally, the database was prepared to conduct statistical comparisons between clusters using inferential techniques that allow examination of whether the observed differences between groups are attributable to real variability or simply to random fluctuations. The selection of these tests considered the structure of the design, the type of scales used, and the variability observed in the pre-analysis.

4. Results

The information obtained through cluster analysis and statistical tests made it possible to structure different levels of review regarding students' financial behavior.

Before delving into more complex analyses, it was verified whether the database was complete. This clarification is important because any missing value affects the stability of the model. Table 1 shows precisely this point: the set of responses was complete, and no corrections or imputations were necessary. This allowed the analysis to be conducted with a fully consistent sample.

Table 1. Case Processing Summary.

Valid		Missing Cases		Total	
N	Percentage	N	Percentage	N	Percentage
463	100.0	0	.0	463	100.0

Source: author's own elaboration (2025)

All 463 cases were valid; there were no losses or missing data, allowing for a complete analysis without imputations.

To verify how the K-Means algorithm behaved during the clustering process, changes in the cluster centers at each iteration were examined. The purpose of this table is to show—almost like a temperature log—how the values decrease until they stabilize. When changes become practically null, it is assumed that the cluster structure has stopped shifting and that the solution is reliable.

Table 2. Iteration history of the K-Means algorithm.

Iteration	Change in cluster center		
	1	2	3
1	.989	1.161	.993
2	.059	.185	.066
3	.014	.149	.074
4	.008	.087	.062
5	.020	.063	.021
6	.021	.044	.022
7	.008	.011	.000
8	.007	.012	.004
9	.003	.004	.000
10	.000	.000	.000

Source: author's own elaboration (2025)

The model reached convergence at iteration 10, showing complete stability in the centers of the three clusters.

Once the clusters were stabilized, the final centers of each group were identified, functioning as “average profiles.” Table 3 summarizes these central values for the three dimensions studied. This table is useful because it allows comparison of the clusters without the need to examine all individual responses; it is sufficient to observe these averages to notice differences in orientation among the groups.

Table 3. Final cluster centers.

	Cluster		
	1	2	3
Financial Knowledge	1.55	2.18	1.59
Financial Attitude	2.56	3.00	3.31
Financial Behavior	2.24	2.44	2.25

Source: author's own elaboration (2025)

These values allow the identification of three main financial profiles: profile 1: Low knowledge and moderate attitude; limited financial behavior. profile 2: High knowledge and positive attitude; more rational financial practices. profile 3: Low knowledge but a highly positive attitude toward finances, without a full reflection in behavior.

After constructing the clusters, the number of students assigned to each group was examined. This distribution is not a minor detail, since a very small or very large cluster could bias interpretations. Table 4 shows that the cluster sizes were relatively balanced, which facilitates more stable comparisons among the identified profiles.

Table 4. Number of cases per cluster.

Cluster	1	175.000
	2	127.000
	3	161.000
Valid		463.000
Missing		.000

Source: author's own elaboration (2025)

Hierarchical cluster analysis using Ward's method and squared Euclidean distance made it possible to define a solution of three well-differentiated groups. Subsequently, the K-Means algorithm was applied, confirming the stability of the model after 10 iterations with no changes in the cluster centers. The total sample consisted of 463 valid cases, distributed as follows: Cluster 1: 175 students, Cluster 2: 127 students, and Cluster 3: 161 students. These results show a balanced distribution of financial profiles among university students from the two Latin American countries included in the study.

To better understand how the clusters behave internally, descriptive statistics were calculated by group. This table allows observation not only of the means but also of variability and response ranges.

A joint reading helps identify patterns: groups that consistently score higher, others that are more irregular, or those that combine moderate means with a striking attitude. It provides a more detailed view of the particularities of each profile.

The comparison of means reveals clear differences among the groups. Cluster 2 consistently ranks higher in both financial knowledge and financial behavior, suggesting stronger management in conceptual and practical aspects. In contrast, Clusters 1 and 3 remain at lower levels of knowledge, although the third shows a much more favorable attitude toward finances, even higher than that of Cluster 2. This creates an interesting contrast: greater disposition in Cluster 3, but without a corresponding translation into better behaviors. Minimum and maximum values confirm that responses are not excessively dispersed, indicating relatively well-defined profiles in each group.

Before applying formal statistical comparisons, variance homogeneity across clusters was tested. Although technical, this step is crucial for deciding which tests to apply. Table 6 presents Levene's test values, indicating whether dispersion is similar across groups or whether differences exist that could influence subsequent analyses.

Levene's results show that the assumption of equal variances is not met for financial knowledge and financial attitude, as significance values are low. In other words, groups differ substantially in dispersion for these two variables. For financial

Table 5. Descriptive statistics by cluster and variable

		N	Mean	Std. Deviation	Std. Error	95% confidential Interval for the Mean		Minimum	Maximum
						Lower Bound	Upper Bound		
Financial Knowledge	1	175	1.5524	.31148	.02355	1.5059	1.5989	1.00	2.33
	2	127	2.1772	.24010	.02131	2.1350	2.2193	1.67	2.83
	3	161	1.5890	.27069	.02133	1.5469	1.6312	1.00	2.17
	Total	463	1.7365	.38915	.01809	1.7010	1.7720	1.00	2.83
Financial Attitude	1	175	2.5629	.24924	.01884	2.5257	2.6000	1.67	2.83
	2	127	3.0013	.33956	.03013	2.9417	3.0609	2.17	4.00
	3	161	3.3064	.25062	.01975	3.2674	3.3454	3.00	4.00
	Total	463	2.9417	.42224	.01962	2.9031	2.9802	1.67	4.00
Financial Behavior	1	175	2.2366	.29871	.02258	2.1920	2.2811	1.40	3.00
	2	127	2.4409	.30998	.02751	2.3865	2.4954	1.60	3.60
	3	161	2.2522	.27796	.02191	2.2089	2.2954	1.40	3.00
	Total	463	2.2981	.30716	.01427	2.2700	2.3261	1.40	3.60

Source: author's own elaboration (2025).

behavior, variances remain stable across clusters, thus meeting the assumption. This contrast suggests that differences between groups are more pronounced in what students know or think about finances, while their actions tend to remain within relatively similar patterns.

With variance assumptions reviewed, the analysis proceeded to examine whether cluster means differed significantly. Table 7 presents the ANOVA results for each financial dimension. The logic is straightforward: if the significance value is low, the groups are not at the same level, and there is statistical evidence of distinct profiles.

ANOVA results showed statistically significant differences among groups in financial knowledge, financial attitude, and financial behavior. These values demonstrate that the profiles differ significantly across all aspects of financial behavior, especially in knowledge and attitude.

Although ANOVA indicates overall differences, it does not specify between which groups they occur. Therefore, multiple comparisons were conducted. Table 8 details these specific differences, identifying which clusters are clearly separated and in which variables.

Table 6. Test of homogeneity of variances (Levene).

		Levene Statistic	df1	df2	Sig.
Financial Knowledge	Based on mean	8.866	2	460	.000
	Based on median	7.150	2	460	.001
	Based on median with adjusted df	7.150	2	454.495	.001
	Based on trimmed mean	9.339	2	460	.000
Financial Attitude	Based on mean	3.688	2	460	.026
	Based on median	3.894	2	460	.021
	Based on median with adjusted df	3.894	2	415.162	.021
	Based on trimmed mean	4.043	2	460	.018
Financial Behavior	Based on mean	.385	2	460	.681
	Based on median	.344	2	460	.709
	Based on median with adjusted df	.344	2	456.032	.709
	Based on trimmed mean	.345	2	460	.708

Source: author's own elaboration (2025).

Table 7. One-way ANOVA by financial dimension.

		Suma de cuadrados	gl	Media cuadrática	F	Sig.
Financial Knowledge	Between Groups	34.096	2	17.048	218.630	.000
	Within Groups	35.869	460	.078		
	Total	69.964	462			
Financial Attitude	Between Groups	46.984	2	23.492	305.381	.000
	Within Groups	35.386	460	.077		
	Total	82.370	462			
Financial Behavior	Between Groups	3.593	2	1.797	20.665	.000
	Within Groups	39.995	460	.087		
	Total	43.588	462			

Source: author's own elaboration (2025).

The Tukey post hoc analysis indicated specific differences among groups: in financial knowledge, Cluster 2 scored significantly higher than Clusters 1 and 3; in financial attitude, Cluster 3 stood out above the other two, with a mean of 3.31; in financial behavior, Cluster 2 slightly outperformed the others, although differences were smaller. These findings confirm that profiles differ not only in knowledge

but also in how students perceive and apply their financial habits.

Clusters 1 and 3 do not differ in financial knowledge; both remain at low and very similar levels. Cluster 2 is clearly separated, with a significantly higher mean, confirming that financial knowledge is the feature that most distinguishes this group.

Table 8. Multiple comparisons (Tukey HSD test).

Dependent Variable	(I) Cluster Case Number	(J) Cluster Case Number	Means Difference (I-J)	Std. Error	Sig.	95% confidential Interval for the Mean	
						Lower Bound	Upper Bound
Financial Knowledge	1	2	-.62478*			-.7013	-.5482
		3	-.03665	.03049	.453	-.1083	.0351
	2	1	.62478*	.03255	.000	.5482	.7013
		3	.58814*	.03314	.000	.5102	.6661
	3	1	.03665	.03049	.453	-.0351	.1083
		2	-.58814*	.03314	.000	-.6661	-.5102
Financial Attitude	1	2	-.43846*	.03233	.000	-.5145	-.3624
		3	-.74356*	.03029	.000	-.8148	-.6723
	2	1	.43846*	.03233	.000	.3624	.5145
		3	-.30511*	.03292	.000	-.3825	-.2277
	3	1	.74356*	.03029	.000	.6723	.8148
		2	.30511*	.03292	.000	.2277	.3825
Financial Behavior	1	2	-.20437*	.03437	.000	-.2852	-.1236
		3	-.01560	.03220	.879	-.0913	.0601
	2	1	.20437*	.03437	.000	.1236	.2852
		3	.18877*	.03499	.000	.1065	.2711
	3	1	.01560	.03220	.879	-.0601	.0913
		2	-.18877*	.03499	.000	-.2711	-.1065

Source: author's own elaboration (2025).

Table 9. Tukey multiple comparisons (Financial Knowledge).

Cluster	N	Subset for alpha = 0.05	
		1	2
1	175	1.5524	
3	161	1.5890	
2	127		2.1772
Sig.		.489	1.000

Note: groups were compared considering differences in size, using an adjusted criterion to balance cluster contributions. Only Clusters 1 and 3 show similar levels, while Cluster 2 remains statistically distant from both.

Source: author's own elaboration (2025).

Table 10. Tukey multiple comparisons (Financial Attitude).

Cluster	N	Subset for alpha = 0.05		
		1	2	3
1	175	2.5629		
2	127		3.0013	
3	161			3.3064
Sig.		1.000	1.000	1.000

Source: author's own elaboration (2025).

The separation into three subsets reflects differentiated attitudes toward finances. Cluster 1 shows more moderate values, Cluster 2 a more favorable intermediate position, and Cluster 3 the highest attitude, indicating a clear gradient across profiles.

Table 11. Tukey multiple comparisons (Financial Behavior).

Cluster	N	Subset for alpha = 0.05	
		1	2
1	175	2.2366	
3	161	2.2522	
2	127		2.4409
Sig.		.890	1.000

Source: author's own elaboration (2025).

In this dimension, Clusters 1 and 3 appear together in the same subset, suggesting no relevant differences in actual financial practices. Cluster 2 stands apart at a higher level, indicating that this group translates knowledge and attitude into concrete actions more effectively. Although differences are smaller than in other variables, they are consistent enough to distinguish Cluster 2.

5. Limitations

Throughout the study, certain margins of uncertainty emerged that are worth making explicit, not because they invalidate the findings, but because they help place them within a more realistic context. One of the least controllable aspects relates to the very nature of self-administered questionnaires. Although basic filters and controls were applied, there is always the possibility that some students responded hastily, with little interest, or with the intention of projecting a more favorable image of their financial behavior. Such biases cannot be completely eliminated and may have influenced the variability observed among clusters.

It must also be acknowledged that the sample, although large and diverse, comes exclusively from two Latin American countries. This leaves out cultural and economic nuances present in other contexts within the region, which may limit the interpretative scope of the profiles obtained. In other words, the financial behaviors identified could differ if the study were replicated in universities located in areas with greater inequality or with different educational models.

Another limitation lies in the use of cluster analysis techniques. Statistical decisions always involve a certain degree of methodological arbitrariness. Although recognized procedures were followed, the resulting classification should not be understood as a rigid or definitive structure, but rather as a useful approximation for describing general patterns.

6. Conclusions

When reviewing, with some analytical distance, the financial profiles that emerged among students from both countries, it becomes evident that these are not merely numerical differences; behind each cluster lies a particular way of relating to money, almost as if each group reflected a distinct way of navigating university life. The coexistence of young people with limited information, others with prudent habits, and a segment that—despite its enthusiasm—has not yet consolidated stable behaviors, sketches a less homogeneous landscape than is usually assumed when discussing “financial education among university students.” And perhaps that nuance is precisely the most valuable contribution.

At several points in the analysis, there was a sense that financial knowledge does not advance at the same pace as attitude, and this lack of synchronization deserves attention. Students who display a positive disposition but lack solid foundations are a reminder that enthusiasm alone does not necessarily translate into sound decisions. This gap becomes even more relevant when considering that many of them are about to enter the labor market, a context in which financial mistakes often have cumulative effects. Therefore, the study suggests that strengthening practical skills could serve as a bridge to reduce the distance between wanting to act well and actually knowing how to do so.

A broader reading suggests implications that go beyond the academic sphere. From a social perspective, the results point to the urgency of policies that promote early economic literacy. Offering isolated workshops is not enough; what is needed is continuity, simulated real-life experiences, and above all, programs that engage with the actual economic realities of young people rather than idealized financial models. This may represent an opportunity for schools, governments, and community organizations to collaborate in less formal and more practice-oriented ways.

In the business sphere, the information provided by the three profiles could be particularly useful. Companies that hire recent graduates could identify, through simple instruments, the type of financial guidance their early-career employees require. It is striking how, in many workplaces, it is still assumed that a young professional manages their salary well simply because they hold a university degree. The study shows that this assumption does not hold. Therefore, internal financial education programs could contribute to greater personal stability and, consequently, higher productivity.

From a governmental standpoint, the findings reveal an area where interventions could be especially cost-effective. The group with a positive attitude but insufficient knowledge represents a highly receptive segment for financial strengthening policies, which could translate into better saving practices, lower indebtedness, and greater participation in formal financial instruments. It could even be considered to incorporate basic financial content into public university education—not as an isolated subject, but as a transversal axis connected to courses in economics, entrepreneurship, and even citizenship.

Although the study advanced understanding of university students' financial profiles, gray areas remain that should not be overlooked. Reliance on self-reported data always raises the suspicion that some responses aim to "look good." In addition, focusing on only two countries prevents observation of broader contrasts across diverse Latin American realities. A subsequent project incorporating universities of different sizes, locations, and educational models would allow the clusters obtained to be enriched and perhaps nuanced.

Regarding future lines of research, one idea that emerged almost spontaneously during the review process is to explore how family economic experiences influence the profiles identified. It would also be interesting to observe students' evolution over time—something akin to following them through their first years of employment to see whether financial behavior patterns fade, persist, or transform. Likewise, crossing these profiles with variables such as financial stress, subjective well-being, or the use of financial technologies would open less explored and potentially revealing paths.

Overall, the results do not seek to close a debate, but rather to open it with greater clarity. The three

profiles are not intended as rigid categories, but as starting points for thinking about young people who, despite sharing classrooms, experience their relationship with money in very different ways. Perhaps the study's greatest implication lies precisely there: recognizing financial diversity within the university population and understanding it as an opportunity to intervene with greater precision, relevance, and humanity.

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