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Understanding how financial knowledge influences the financial behavior of millennials in Ecuador

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Abstract

Millennials in Ecuador, numbering approximately 3.9 million people, representing 23.2% of the population, face unusual final challenges. The economic and social circumstances of the country, together with the development of digitalization, have had an impact on the monetary habits of the generation. Young people must combine consumption, savings, and debt in an environment where financial education is not available to everyone. The objective of the study is to evaluate the influence of financial knowledge on the financial behavior of millennials in Ecuador acknowledgments aspects that address (a) savings, (b) consumption, (c) indebtedness and (d) investment of the target group. The methodology was proposed with a quantitative, non-experimental cross-sectional approach using a stratified convenience sampling, gathering information in three of the main provinces of Ecuador (Guayas; Azuay and Manabí); with the use of validated questionnaires that allowed to identify significant relationships between the dimensions of knowledge and financial behavior. The results show that the Theory of Bounded Rationality (Simon, 2000) is a predictive model to show the relationships between financial knowledge in its subjective dimension and the constructs of financial knowledge, thus contributing with new variables that condition financial behavior millennial in Ecuador.

Keywords: Millennial; financial behavior; debt; consumption; savings; investment.

Cómo influyen los conocimientos financieros en el comportamiento financiero de los millennials en Ecuador

Resumen

Los Millennials en Ecuador, que suman aproximadamente 3,9 millones de personas, representando el 23,2% de la población, enfrentan desafíos finales inusuales. Las circunstancias económicas y sociales del país, junto con el desarrollo de la digitalización, han repercutido en los hábitos monetarios de la generación. Los jóvenes deben combinar consumo, ahorro y endeudamiento en un entorno en el que la educación financiera no está al alcance de todos. El objetivo del estudio es evaluar la influencia del conocimiento financiero en el comportamiento financiero de los millennials en Ecuador reconociendo aspectos que abordan (a) el ahorro, (b) el consumo, (c) el endeudamiento y (d) la inversión del grupo objetivo. La metodología se planteó con un enfoque cuantitativo, no experimental de corte transversal utilizando un muestreo estratificado por conveniencia, recolectando información en tres de las principales provincias del Ecuador (Guayas; Azuay y Manabí); con el uso de cuestionarios validados que permitieron identificar relaciones significativas entre las dimensiones de conocimiento y comportamiento financiero. Los resultados muestran que la Teoría de la Racionalidad Limitada (Simon, 2000) es un modelo predictivo para mostrar las relaciones entre el conocimiento financiero en su dimensión subjetiva y los constructos de conocimiento financiero, aportando así con nuevas variables que condicionan el comportamiento financiero millennial en Ecuador.

Palabras clave: Millennial; comportamiento financiero; desafíos económicos y socialesdeuda; consumo, inversión.

1. Introduction

The generation called Millennials is a widespread category, recognizing those who were born with the consolidation of the digital age and whose first cohort became adults at the turn of the millennium. Although there is no agreement on their time limits, it can be said that their starting point of reference is the early 1980s and extends until the end of 2000, they are also called Generation Y (Ibero-American Institute of Youth, 2015). Millennials are at a stage in their lives where their financial behavior greatly influences the financial well-being of their lives. These financial behaviors require them to possess the financial knowledge to assess financial trade-offs and the ability to apply that knowledge to their specific circumstances (Henager & Cude, 2016). However, evidence has suggested that the level of financial knowledge is significantly lower than that of previous generations (Mottola, 2017); where it was possible to understand, for example, the importance of financial education in

the management or personal financial behavior of Generation Z, affected by the current era of digitalization, where the consumption behavior of students is difficult to control due to the ease of online transactions (Bado, Hasan, Tahir, & Hasbiah, 2023). Given that Millennials will make up 75% of the global workforce in 2025 (Schawbel, 2012), the importance of this generation is growing, and it is necessary to evaluate the financial knowledge of Millennials and the role they play in their lives financial behaviors.

According to the Instituto Nacional de Estadísticas y Censos (INEC, 2017) in Ecuador there are 3,900,000 millennials who represent 23.2% of the total population. The report by the auditing firm Deloitte & Touche (2018) indicated, through a survey of more than 10,455 millennials, that this generation "would rather have no more work than a job they hate." Among the top choices for job desirability were "loving what I do" which trumped salaries and big bonuses. This situation can also be observed in the Ecuadorian labor reality, since formal employment is affected by several problems that affect millennials. According to the Banco Central del Ecuador 2023, the adequate employment rate has decreased in the recent past and is approximately 31% of the economically active population (INEC, 2015).

Furthermore, Ecuadorian millennials face informality and informal contracts much more than other generations, making them dissatisfied with their jobs and performing verbally meaningfully rather than simply managing money. Furthermore, the International Labor Organization (ILO) has indicated that relative to other age groups, the youth unemployment rate in

Ecuador, included in this definition, that is, younger millennials, still has some of the highest unemployment rates. Among the causes include the lack of accessibility to decent and high-quality jobs, the lack of specific qualifications, and the possibility of independent employment and subsequent development (International Labour Organization, 2022). Due to this situation, several workers prefer to employ themselves or be employed through freelance operations, depending on their level of autonomy and independence (Fundación Friedrich Ebert, 2021, cited Navarrete, 2013). Additionally, Schawbel's (2012) study noted that approximately 83% of millennials are "looking for a job where creativity is valued," while more than 9 out of 10 millennials are motivated to work harder when they know where the job is going. In the context of Ecuador, according to the study by the Camara de Comercio de Quito (2021) it was revealed that the lack of effective communication and clarity in the strategic objectives of companies is a constant problem. The lack of transparency and alignment in organizational goals inspires millennials less because they understand that, outside of job stability, they want to be useful and have a meaningful purpose in their work activities.

In this context, the objective of this work will focus on investigating the influence of financial knowledge on the behavior of millennials in Ecuador through dimensions such as savings, consumption, debt, and investment per se. Therefore, the research question assumed for this research is formulated as follows: What is the influence of financial knowledge on the financial behavior of millennials in Ecuador? Since there are no studies regarding this influence on this particular group,

the results of this research will generate new knowledge about how they act in financial terms and what type of rationality they apply concerning their financial administration. Furthermore, it is worth remembering that, today, millennials have a relevant role in the workplace, social and economic spheres. The central hypothesis of this project suggests an association between financial knowledge and known behaviors: increasing savings decreases the level of debt. As a result, it is expected to be able to draw a financial profile of millennials in Ecuador and know in detail their decision-making process related to money, which becomes relevant to improving financial education programs, influencing public policies, and creating ad hoc financial products, as mentioned by Schawbel (2012).

To carry out the research, a non-experimental quantitative cross-sectional design will be used. The fundamental variables include financial knowledge (both objective and subjective) and financial behavior, which will include elements such as savings, consumption, debt, and investment. Financial knowledge will be evaluated through validated questionnaires that measure the perceived and real knowledge of the participants; these questionnaires will be distributed in various provinces of Ecuador.

This analysis will not only facilitate the observation of financial behavior patterns but will also help develop effective tactics to improve financial understanding. For this reason, the sampling, which will be carried out conveniently and will be stratified, will focus on millennials from three fundamental provinces: Guayas, Azuay, and Manabí.

2. Financial performance: Theoretical Framework

Attention to financial capability and financial behaviors is especially relevant in an era where Millennials are making increasingly complex financial decisions (Friedline & West, 2016). The behaviors that emerge from these decisions and their outcomes may have long-term implications for Millennials' abilities to achieve financial stability and accumulate wealth. Various studies (Hernández & Torres, 2018; Mboga, 2017; Miller, 2014) show that millennials who are more financially stable can also achieve economic mobility throughout life. Millennials who are financially fragile, lack emergency savings, use high-cost alternative financial services, and have too much debt been likely to struggle to save and be financially stable in the future. These millennials may struggle to maintain financial stability, let alone achieve economic mobility.

While these may seem like purely individual behaviors over which Millennials have ultimate control, they may behave in accordance with the knowledge and opportunities available to them through institutional arrangements embedded in education, labor market participation, and ownership of the house. The university plays a significant role in offering young adults a valuable opportunity to gain financial literacy before entering the world of work. This allows them to make financial decisions both in their daily lives and in the long term (Bado et al., 2023). Financial capability recognizes that the financial behavior of millennials is not based solely on individual knowledge; they also need to be included in the financial mainstream, where they have opportunities to engage in healthy financial behaviors. Therefore,

interventions that provide Millennials with a combination of financial inclusion and financial education may be useful in promoting healthy financial behaviors.

Within these authors' research, a key finding was the highly significant relationships between each of the short-term and long-term behavioral indices and the age group variable for the entire sample. Using the 18-24 age group as the reference group, each of the age groups was progressively more likely to engage in the behaviors over the long term. In addition, the odds ratios for the age groups were higher than for any of the financial education components. In fact, only income had a larger overall relationship with financial behavior than age group. For short-term behaviors, significant relationships were negative compared to the 18-24 reference group for the entire sample. This is largely due to the emergency fund and checking account overdraft variables.

Based on the literature review carried out, the theory of bounded rationality proposed by Simon (2000) was chosen as the theoretical framework for this study, which associates financial knowledge and financial behavior and has been used in previous studies of behavioral financial research (Kim et al., 2018; Robb, 2014). The theory of bounded rationality indicates that individuals are limited in their ability to evaluate and choose optimal behaviors. While the options can often appear to be contradictory and potentially irrational (Simon, 2000). Heterogeneous decisions are made due to three major challenges experienced by the consumer: (a) the environments that exist in are complex; (b) the mental capacities of individuals are limited; and (c) resources, such as time or money, are both finite and scarce. Within the context of financial

behavior, financial knowledge measures the individual's ability to understand the financial environment in which they find themselves and their ability to assess and determine optimal courses of action (Kim et al., 2018).

This study contributes to the existing literature, providing a complete understanding of the relationship between financial knowledge and behavior among millennials in Ecuador, based on the theory of bounded rationality. In the context of millennials in Ecuador, this theory gains special relevance due to the special circumstances surrounding their financial decisions. The financial environment in which millennials live in Ecuador is extremely complicated: the digital reality, financial instability, and the lack of access to and availability of financial education prevent them from making rational decisions. Despite the growing popularity and accessibility of digital possibilities, data from the INEC (2022) confirmed that such opportunities, in terms of comparative studies on the income of millennials, raise the same amount of digital resources without the required financial literacy. Likewise, the most recent research by Pérez & García (2022), local authors, indicates that millennials in Ecuador face a consistent and unique socioeconomic pressure: a high rate of underemployment and a lack of access to and implementation of formal financial services.

Financial knowledge is an integral dimension of financial literacy (Huston, 2012), which comes from a wide source with varying levels of quality and reliability, including formal and informal education (Dick, Jaroszek, & others, 2013; Raju, Lonial, & Mangold, 2015). It is divided into components: (a) objective and (b) subjective (Flynn & Goldsmith, 1999; Raju et al., 2015; Woodyard

& Robb, 2012). According to Brucks (1985), objective financial knowledge is a real knowledge of the construction, measured by some type of test and previous experience, while subjective financial knowledge represents the perception of knowing that the individual has that is related to his or her financial situation experience.

In the field of financial knowledge for the prediction of financial behavior attitude, the results of Flynn and Goldsmith (1999) stand out, who showed that subjective financial knowledge was significantly related to attitudes and opinions about a fact. In addition, the results of Raju, Lonial, and Mangold (2015) showed that subjective financial knowledge was a better predictor of satisfaction in purchase decisions than objective financial knowledge. From a risk perspective, according to a study conducted by Hadar et al. (2013), it was found that financial knowledge has a significant influence on attitudes towards risky investment. Furthermore, risk tolerance was found to moderate the relationship between investment intention and actual investment (Hadar et al., 2023).

Concerning behavior related to indebtedness, Robb and Woodyard (2011) stated that there is a strong positive effect between subjective financial knowledge and credit card use. Likewise, Woodyard and Robb (2012) affirmed that subjective financial knowledge seems to be the most important of the factors to determine the financial capacity of the individual. Finally, Tang and Baker (2016) also found that subjective financial knowledge is closely related to the experience related to the product or service and the confidence of consumers in their ability to make effective decisions.

3. Methodology

Within the research design, the approach made by Hernández, Fernández, and Baptista (2014) has been considered, who classify the design of research a) according to the purpose; b) according to the chronology and c) according to the number of measurements.

In this sense, the research will be carried out under a non-experimental or observational design with data taken at a moment in time, considering a transectional cut with a retrospective chronology. That is, the data collection will be done through an academically validated instrument that identifies the level of financial knowledge that millennials have and measures the way they interact before financial decision-making situations.

A post-positivist paradigm will be applied that seeks to find a cause behind the results (Creswell, 2003), because the nature of the study seeks to identify the factors that determine said behavior, evaluating the influence of financial knowledge with it. The non-experimental and cross-sectional design is suitable for this study since it allows us to observe the relationships between financial knowledge and financial behavior of millennials at a specific time without direct intervention. This approach is consistent with the study's objectives of evaluating how financial knowledge correlates with financial behaviors, providing a descriptive and analytical perspective without modifying the variables. Additionally, this design is useful for identifying patterns and associations that can be further explored in future research.

The study population is young people born between 1980 and 1999,

according to the Instituto Iberoaméricano de la Juventud (2015). According to the Instituto Nacional de Estadísticas y Censos (2017), in Ecuador, there are 3,900,000 millennials; the same ones distributed by province are: a) Guayas, b) Pichincha, c) Manabí, and d) Azuay.

The sample design will be stratified, emphasizing the provinces of Guayas, Manabí, and Azuay. The sample design will be stratified, emphasizing the provinces of Guayas, Manabí, and Azuay. This design ensures a proportional representation of the main provinces of Ecuador and allows for the generalization of the survey findings to the millennial population of Ecuador. However, for the selected strata, non-probability convenience sampling was used, as it was important to select respondents as efficiently as possible given the limited access and available resources. Measures were taken to ensure the sample size and diversity and to avoid potential bias. In addition, variables such as age, gender, and socioeconomic level, among others, were considered to ensure the internal validity and precision of the study population sample.

For the calculation of the sample, the formula for an infinite population of the normal distribution is used, with a confidence level of 95%, an estimation error of 5% and p=q=0.5. In total, 1,152 surveys will be conducted on individuals who meet the aforementioned profile. This data collection will be divided into two stages; the first to carry out the pilot test with 100 observations that will allow correcting any relevant aspect in the instrument and the second with the collection of 1052 surveys considered as the basis of the investigation. For the data collection, a non-probabilistic convenience sampling is considered.

Authors such as Scharager and Reyes (2015) maintain that there are situations in which it is more convenient to use a non-probabilistic sampling, such as in studies that are aimed at very specific populations and groups where a careful and controlled selection of subjects with certain characteristics is important for the researcher.

Based on this definition, the data collection will be carried out in universities of the previously stratified provinces, with the support of the Research Group on Taxation and Finance, in which 14 professors from 4 universities in the country participate:

a) Universidad Católica de Santiago de Guayaquil,

b) Escuela Superior Politécnica del Ecuador,

c) Universidad Laica Eloy Alfaro de Manabi, and

d) Universidad de Cuenca.

To measure the variables of interest in the research, appropriate instruments will be used depending on the type of study. The research subjects will be chosen for convenience in the most numerically representative universities of each province, surveying students, teachers, administrative staff, and authorities who are in the age range of study. The measurement instruments are adequate when they record the observable data that represent the concepts to be measured (Hernández, Fernández & Baptista, 2014); for the validity of the research instruments, the cultural and ethnic changes in which they occur must be taken into account. the same were developed (Gaite et al., 1997). The instruments were adapted to a language that was accessible and understandable for millennials and Ecuadorians in general. This included the use of everyday terminology and

expressions that reflect the local financial context, avoiding technical jargon that could make understanding difficult.

To measure the validity and reliability of the instruments to be used, the double translation criteria and the use of Cronbach's Alpha coefficient will be applied, which studies the internal consistency of the measures. According to this technique scores greater than or equal to 0.7 to guarantee the reliability of the scale (Hair, Bush, & Ortinau, 2004). For this research, two scales will be presented: a) Survey of Consumer Finance and b) Survey Questionaire National Financial Capability. As the Survey of Consumer Finance instrument is in English, the double translation process will be carried out, which implies the adaptation of the individual elements, the instructions for the questionnaire and the response options (Beaton et al., 2000), the double translation protocol to be used in this research includes the following stages: a) Initial translation, b) synthesis of the translations, c) translation (blind pair) to the original language, d) expert committee, and e) pre-test (Beaton et al., 2000).

For the collection of information, the survey will be used by applying a validated and tested questionnaire that includes the 16 questions of the aforementioned scales. The data collection sequence begins with the formal request to universities in the provinces of Guayas, Manabí, and Azuay requesting access for the collection of information in their undergraduate and postgraduate programs, among their teaching staff and administrative staff. Once access has been obtained, data collection will be scheduled jointly with the authorities of the entities. A brief presentation will be made to the study target group to explain the scope of

the study, requesting informative data from each survey, allowing them to read and accept the informed consent prior to completing the questionnaire. The data will be collected at a specific time, according to the schedule for access to higher education institutions (IES).

As mentioned before, this research work has the support of the research group on taxation and finance, which aims to develop joint projects that allow the publication of articles, presentation of papers, and promotion of the development of scientific knowledge with researchers from various universities in the country. This study has been planned to have the collaboration of research professors from the universities: a) Universidad Católica de Santiago de Guayaquil, b) Escuela Superior Politécnica del Litoral; c) Universidad Laica Eloy Alfaro de Manabí, and d) Universidad de Cuenca, who will contribute to the preparation and analysis of the research results. The information obtained through the surveys will be coded and included in the SMARTPLS program for the corresponding statistical analysis.

Based on a multivariate technical analysis, performing a structural equation model to determine the causal relationships between financial knowledge and the financial behavior of millennials in Ecuador, we work with the inclusion of socio-demographic variables, the same ones that contextualize the relationship. First, a Confirmatory Factor Analysis (CFA) will be carried out to validate the structure of the measurement model and evaluate the internal consistency of the constructs through composite reliability and convergent validity (AVE). In addition, it has been considered to establish differences by region, gender, age, and socioeconomic status, which

will give greater relevance to these results, being able to find significant findings in the world literature concerning millennials and financial behavior. Then, the second-order structural equation model will be used to analyze the data, which allows for examining dependency relationships. This model will allow the evaluation of the relationships between the latent variables of the study.

Contextual variables, such as region, gender, and age, will be integrated into the multivariate analysis through second-order SEM. This will allow us to evaluate how these variables affect the observed relationships between financial knowledge and financial behavior. By including these variables as covariates, we aim to identify significant differences in the way different subgroups of millennials manage their finances. The use of SEM will also help explore causal relationships and validate specific hypotheses about the effects of these variables.

A data collection was carried out with a minimum of 384 surveys for each province: a) Guayas, b) Azuay and c) Manabí. From this information, the data was entered into SPSS IBM, reporting the following results. 1207 data were entered, of which 33% are students from the province of Guayas, 33.8% with students from the province of Azuay, and 33.2% of students from the province of Manabí. It is important to note that the data collection was carried out in public and private universities in these provinces.

• **Hypotheses**

The Bounded Rationality Theory proposed by Simon (2000) associates financial knowledge and financial behavior and has been used in previous research studies on financial behavior (Kim et al., 2018; Robb, 2014) . The Theory of Bounded Rationality indicates that individuals are limited in their ability to evaluate and choose optimal behaviors, while the options can often appear to be contradictory and potentially irrational (Simon, 2000). Building upon the previously discussed framework of Bounded Rationality Theory, this study further explores the link between financial knowledge and financial behavior among Ecuadorian millennials. The analysis focuses on how the specific economic and social conditions of this population shape their everyday financial decision-making.

As detailed in the theoretical framework, financial knowledge comprises both objective and subjective dimensions, each playing a distinct role in shaping individuals' financial behavior. These dimensions serve as the basis for the formulation of the study's hypotheses regarding millennials' financial decisions.

Prior findings (e.g., Flynn & Goldsmith, 1999; Raju et al., 2015), as noted in the theoretical framework, suggest that subjective financial knowledge is a stronger predictor of decision satisfaction and behavioral intentions. These insights guide the formulation of the sub-hypotheses regarding the influence of perceived knowledge on financial choices.

Previous studies have also shown that subjective financial knowledge is strongly associated with consumer confidence in managing debt and making credit-related decisions (Robb & Woodyard, 2011; Tang & Baker, 2016). These findings support the hypothesis that perceived financial understanding may significantly influence millennials' debt behavior.

The literature review has made

it possible to recognize the influence between financial knowledge and behavior; however, these studies have not considered the personal variables of generational groups, especially for millennials. The validation of the proposed hypothesis will allow considering the individual's age, socioeconomic background, and other relevant generational factors to which millennials belong. In addition, these results will present relevant information for professionals in the financial and banking areas and those responsible for state policies, evidencing the personal motivations that millennials have in Ecuador, emphasizing their financial knowledge in the behavior of this generational group. From this, the authorities can develop strategies to create adequate financial products and control the allocation of existing credit products to reduce over-indebtedness and financial distress among individuals. Based on the Theory of Bounded Rationality (Simon, 2000) and the preceding analysis, the following eight sub-hypotheses summarize the main relationships identified (Illustration 1).

Illustration 1
Theoretical model proposal
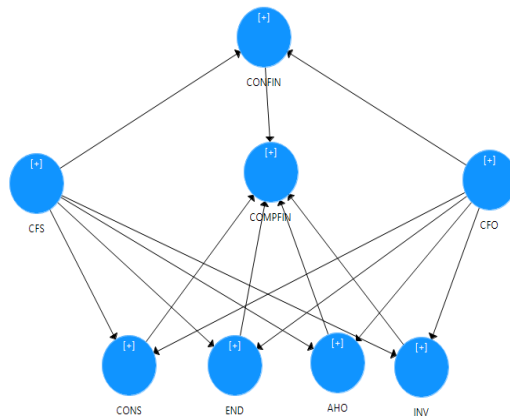
Adapted from The Theory of Bounded Rationality Simon, HA (2000). *Bounded rationality in social science: Today and tomorrow. Mind & Society,* 1(1), 25-39. https://doi.org/10.1007/BF02512227

4. Financial behavior of millennials: results and discussion

This section evaluates the financial habits of millennials, revealing key findings and conclusions about their economic behavior.

• Descriptive data analysis

For the descriptive analysis, demographic characteristics such as: a) marital status, b) gender and c) age were evaluated. The university of origin of the respondent and the employment situation were also evaluated. Based

on the information collected, it appears that 81.11% of millennials are single, especially in the province of Azuay. The second group to highlight are married millennials, who represent 11.93% of the total population studied. Marital status can be considered as a background study variable for financial behavior, which will be evaluated in the proposed structural equation analysis. In addition, significant statistical differences can be found in the way of behaving financially in relation to the marital status and responsibility of the millennial.

In relation to the gender of the respondents, the results are symmetrical, showing that both men (51.86%) and women (48.14%) were part of the study. The results of the research were carried out in public and private universities in the country with the support of the Research Group formed from the Universidad Católica, where more than 14 professors from seven universities collaborated to collect data for this research. As the object of study is the provinces of: a) Guayas; b) Azuay and c) Manabí, four universities were chosen, described in the previous figure for the collection of information, the profile collected responds to students, teachers and administrative staff that fit into the age range of millennials.

The survey showed that 49.95% of respondents are full-time students, 35.65% are independent workers, 7.78% part-time workers in a company. It is important to highlight that in the age variable, the range established by the Instituto Iberoaméricano de la Juventud. (2015) was identified, which indicates as generation Y or millennials those people born between 1979 and 2000. That is to say that at the time of data collection (October – December 2019), people who were between 18 – 32 years old. The results were concentrated between 19 and 27 years of age, representing 81.60% of the total sample.

• Measurement Model

After the descriptive analysis, the measurement analysis was carried out, the Confirmatory Factor Analysis (CFA) was used, the discriminant validity was measured by means of the Fornell-Larker criterion (1981) and the convergent validity by means of the analysis of the average variances extracted (AVE). In addition, to confirm the internal consistency of the scales, the composite reliability coefficient and Cronbach's Alpha were evaluated.

In addition, the factor loads of the items were evaluated, confirming that all were greater than 0.70, with the exception of two items related to objective financial knowledge (OFC) that were excluded for the final analysis (Dunn, Seaker, & Waller, 1994). Cronbach's alpha reported for all constructs is between 0.711 and 0.908, demonstrating high reliability in the dimensions of the model (Hair & Anderson, 1999). In relation to the composite reliability, all the constructs were higher than 0.7 (Fornell & Larcker, 1981), with the results having a minimum of 0.7662 and a maximum of 0.933. In addition, the average variance extracted (AVE) values were greater than 0.5, guaranteeing the convergent validity of the model.

The discriminant validity of the constructs allowed us to verify that none of the items had a higher load than the dimension that was intended to be measured (Barclay, Higgins, & Thompson, 1995). Likewise, the discretionary validity was measured with the heterotrait-monotrait (HTMT) correlations, verifying that all the items are below 0.85 (Hair et al., 2016). Next, the evaluation of the model variables is presented (table 1).
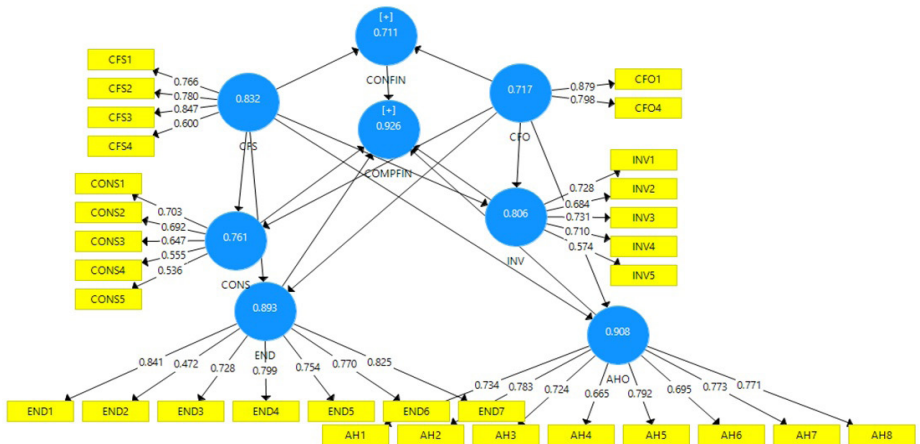
Table 1
Descriptive results – Age evaluation of the model variables

	Cronbach's Alpha	rho_A	Composite reliability	Average variance extracted (AVE)
AH OR	0.908	0.909	0.908	0.552
CFO	0.717	0.806	0.824	0.702
CFS	0.832	0,855	0.839	0.571
COMFIN	0.711	0.933	0.934	0.536
CONFIN	0.811	0.843	0.799	0.546
CONS	0.761	0.762	0.761	0.589
END	0.893	0.908	0.897	0.559
INV	0,806	0,871	0,829	0,512

The next figure shows Cronbach's alpha in the model constructs and the path coefficients in the structural internal model. For the evaluation of the structural model, the collinearity of the variables was evaluated using the Variance Inflation Factor (VIF). According to Hair et al., (2012), if the VIF value is greater than 5, there is evidence of collinearity between the factors or variables, so it can be considered to join, create or eliminate a construct (Illustration 2).

Illustration 2
Validated research measurement model

The table 2 below shows the VIF between the factors of the proposed model.

Table 2
Collinearity statistics

	AH OR	CFO	CFS	COMPFIN	CONFIN	CONS	END	INV
AHO				2.494				
CFO	1.030				1.030	1.030	1.030	1.030
CFS	1.030				1.030	1.030	1.030	1.030
COMPFIN								
CONFIN				1.955				
CONS				3.512				
END				2.034				
INV				2,251				

The results of the VIF did not present problems of collinearity between the factors of the model, which are not greater than the accepted critical value of five. After the VIF analysis, the structural model was estimated using the SmartPLS software, obtaining standardized regression coefficients with values between -1 and 1. The figure below indicates the results of the structural model estimation after solving the collinearity problem (Illustration 3).

Illustration 3
Structural research model validated
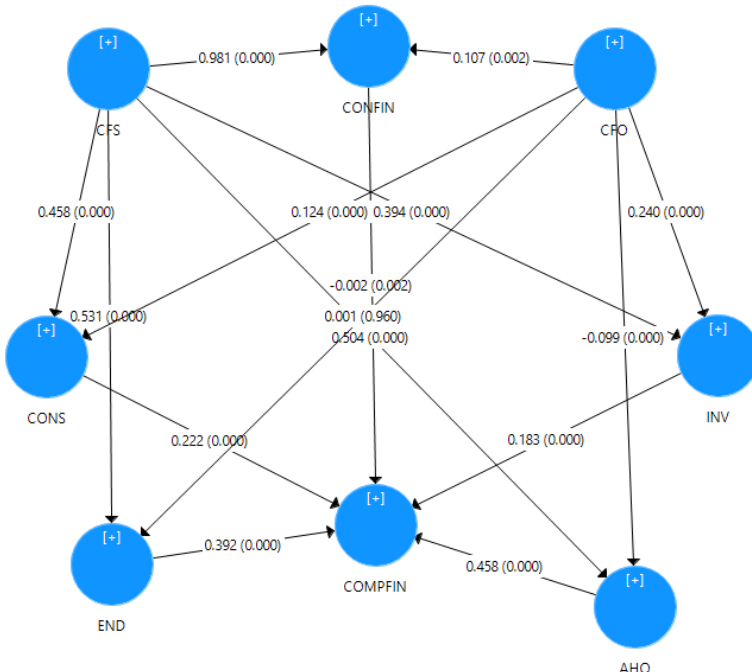
The significance of the model variables was evaluated by evaluating the p-value of the relationships. By means of the structural model estimation by means of the PLS algorithm and by *bootstrapping* with five thousand subsamples, it was confirmed that the financial behavior of millennials can be explained in a significant and positive way by saving, indebtedness, consumption and investment with a significance level of 0.05. The figure above shows the results of the estimations of the structural model, showing the correlation coefficients and the p-value. The results show that all relationships are significant, except for the relationship between objective financial knowledge (CFO) and indebtedness (END) (table 3).

Table 3
Validation of the hypotheses and Sub-hypotheses

	Original sample	Sample mean	Standard deviation	t-statistics	P Values
Hg: CONFIN -> COMPFIN	**-0.002**	**-0.003**	**0.001**	**3,025**	**0.002**
Sub-H1: CFO -> AHO	-0.099	-0.097	0.023	4,197	0.000
Sub-H2: CFS -> AHO	0.504	0.508	0.024	20,691	0.000
Sub-H3: CFO -> END	0.001	0.005	0.028	0.050	0.960
Sub-H4: CFS -> END	0.531	0.534	0.025	21.347	0.000
Sub-H5: CFO -> INV	0.240	0.248	0.035	6.816	0.000
Sub-H6: CFS -> INV	0.394	0.392	0.026	15.087	0.000
Sub-H7: CFS -> CONS	0.458	0.457	0.025	18.071	0.000
Sub-H8: CFO -> CONS	0.124	0.129	0.029	4,290	0.000

From the table presented above, the information related to objective financial knowledge and the dimension of financial behavior is extracted: a) savings; b) indebtedness; c) investment and consumption. The results show (through the values) that the relationships between these variables are significant, except for the influence of objective financial knowledge and indebtedness. This result is consistent with the studies of (Woodyard & Robb, 2012) who stated that the main determinant for an individual to acquire a debt is subjective financial knowledge, above the objective that lies in the real knowledge of the person and not in self-perception of knowledge. On the other hand, and according to (Manteiga, 2012) with a significance level of 95% and a statistical error of 5%, the results of a measurement are considered relevant when their t≥1.96. In the results analyzed, three of the four sub-hypotheses are greater than 1.96.

Table 4
Validation of the Sub-Hypothesis. Objective financial knowledge

	Original sample	Sample mean	Standard deviation	t-statistics	P Values
Sub-H1: CFO -> AHO	-0.099	-0.097	0.023	4,197	0.000
Sub-H3: CFO -> END	0.001	0.005	0.028	0.050	0.960

Cont... Table 4

Sub-H5: CFO -> INV	0.240	0.248	0.035	6,816	0.000
Sub-H8: CFO -> CONS	0.124	0.129	0.029	4,290	0.000

Another of the tools used to measure the influence of objective financial behavior on the dimensions of financial behavior is the Pearson correlation coefficient. To measure R2, we worked with the average of the results of the dimension of objective financial knowledge and the dimensions of financial behavior of savings, investment, consumption and indebtedness.

The table presented above shows that, despite the fact that the relationships between objective financial knowledge and savings, consumption and investment are significant. The correlation coefficient is low, such is the case that the influence of average objective financial knowledge on average consumption is 0.133; that is, only 13.3% of the variance of average consumption is explained by this dimension of financial knowledge. The same occurs with the average investment dimension; the results show that the influence of the objective financial knowledge variable on investment is 0.157. This information allows us to conclude that 15.7% of the variances of the average investment is influenced by this type of knowledge (table 5).

Table 5
Pearson correlation coefficient

		Cf_Avg	En_Prom	ah_prom	Cons_Avg	Inv_Avg
Cfo_Avg	Pearson correlation	1	-.016	-.066 *	.133 **	.157 **
	Next (2-sided)		,567	.021	,000	,000
	N	1207	1207	1207	1207	1207
*. The correlation is significant at the 0.05 level (bilateral).						
**. The correlation is significant at the 0.01 level (bilateral).						

On the other hand, and unlike the dimensions of financial behavior described above, the influence of objective financial knowledge on saving is inversely proportional, so that R^2 is -0.066, that is, the relationship is investment. Within this relationship, it also stands out that the p value is ≥ 0.05, therefore, it is a non-significant relationship. What is interesting about this finding is that the results, when measured by means of the structural equations in this particular relationship, did show significance (Table 6). However, when the measurement is made considering the averages, the relationship is not significant. This addresses the importance of each item in the measurement of latent variables and measurement variables.

Table 6
Validation of the sub-hypothesis subjective financial knowledge

	original sample	Sample mean	Standard deviation	t-statistics	P Values
Sub-H2: CFS -> AHO	0.504	0.508	0.024	20,691	0.000
Sub-H4: CFS -> END	0.531	0.534	0.025	21,347	0.000
Sub-H6: CFS -> INV	0.394	0.392	0.026	15,087	0.000
Sub-H7: CFS -> CONS	0.458	0.457	0.025	18,071	0.000

Defining generations and exploring their differences is a subject of much current debate involving political and economic interests. In the context of financial behavior, an area of particular interest has been the recent generational shift, which has seen the arrival of the first digital natives, native speakers of the digital language, in the workplace *(*Abrams & von Frank, 2014; Egnatoff, 1999). Howe & Strauss, 2009; Lyons et al., 2014; Zemke, 2000). Among the results of the study, it is addressed that Generation Y, the Millennials who are now entering the labor market, differ from previous generations. These results coincide with the conclusions they present (Cogin, 2011; Myers & Sadaghiani, 2010) that argue that this generation does not value traditional salaried employment to the same extent as their parents (Tabla 7). Other authors, such as Chou et al. (2012) and Twenge et al. (2012), concluded that the Millennial generation expects to be able to work under a new management culture, contribute to innovation in the workplace, and reconcile work and leisure in novel ways.

Table 7
Pearson correlation coefficient

		En_Prom	ah_prom	Cons_Avg	Inv_Avg	Cfs_Avg
Cfs_Avg	Pearson correlation	.512 **	.485 **	.462 **	.413 **	1
	Next (2-sided)	,000	,000	,000	,000	
	N	1207	1207	1207	1207	1207
**. The correlation is significant at the 0.01 level (bilateral).						

5. Conclusions

In the proposed study, more than 400 millennials between the ages of twenty and thirty were surveyed, the same ones who are in a period of life full of financial behaviors that will greatly influence their financial well-being for life. These financial behaviors require millennials to possess both the financial knowledge to assess financial trade-offs and the ability to apply that knowledge to their specific circumstances.

However, the evidence suggests that the level of financial knowledge of Millennials is significantly lower than that of previous generations (Mottola, 2017). Given that Millennials will make

up 75% of the global workforce by 2025 (Schawbel, 2012), the growing importance of this generation requires an assessment of Millennials' financial literacy and the role it plays in influencing their financial behaviors.

This study extends previous research by investigating the relationship between financial knowledge and financial behaviors among Millennials within two dimensions: short-term and long-term financial behaviors. Survey data from public and private universities were used to provide a comprehensive financial profile of Millennials, and a series of analyses were conducted to isolate the role of financial literacy in these various financial behaviors. The results indicated that financial knowledge was related to a greater probability of exhibiting more positive financial behaviors in the short and long term, measured in separate financial behavior indices. The results were strong on different measures of financial knowledge.

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