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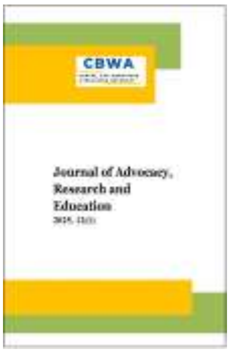

Objective and Subjective Financial Wellbeing: A Gender Study of Financial Behavior in Mexico

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Abstract

Financial well-being can be measured objectively and also subjectively through people's perceptions of their financial condition. This research aims to identify the relationship between objective and subjective financial well-being and financial behavior based on gender. We analyzed data from the National Survey on Financial Health (ENSAFI), a national sample of the Mexican population with 20,448 participants from the thirty-two states of Mexico. Indices were constructed for the financial behavior, objective financial well-being, and subjective financial well-being variables, their correlations were analyzed, and a logistic regression model was estimated. The results confirm the existence of a positive and significant relationship between the two dimensions of financial well-being and financial behavior, being greater the objective dimension. Likewise, it was found that both levels are lower for women and that the difference is more pronounced in the objective dimension. In addition, control variables such as age, marital status, economic dependents and receipt of financial support were observed. Regarding age, the findings show a negative effect mainly on the objective component of financial well-being, and the impact is relatively more pronounced in the male population. About marital status, women show more significant negative relationships than men, the latter being affected in their financial well-being only when their marital status is a free union. The existence of dependents shows a clear and consistent negative association with objective and subjective financial well-being. Finally, the positive influence of government financial support is only found in the subjective component and, mainly, in the financial well-being of the male population.

Keywords: Financial Behavior, Gender, Mexico, Objective Well-Being, Subjective Well-Being.

1. Introduction

The term financial well-being refers to the fullness that a person has to fulfill their obligations, satisfy their needs, and plan their future with the economic resources they have available (CFPB, 2015; García-Santillán, 2024; Prendergast et al., 2018). Financial well-being, also known as financial health, refers to the ability to manage personal finances effectively, thereby mitigating the risk of facing financial difficulties and allowing individuals to feel secure and free to make daily and future expenses (INEGI, 2023c).

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Studies have been found to affirm that well-being is associated with the best financial behaviors of individuals when deciding on aspects of their economy (Brüggen et al., 2017; Iramani, Lutfi, 2021; Mejía, 2015). Responsible financial practices lead to the better utilization of economic resources, resulting in financial prosperity (Carpena, Zia, 2020; Serido, 2022; García-Mata, Zerón-Félix, 2023). When the concept of financial behavior is discussed, it is assumed as the cognitive and emotional tendency of individuals to make decisions related to their finances, evaluating the available options through their knowledge and skills (Hernández-Rivera, Flores-Lara, 2022; Ricciardi, 2008), which will be based on personal experiences or other people's experiences that have been shared by socializing agents (Chuliá et al., 2022).

The lack of appropriate financial behavior has been linked to health problems (Pew Research Center, 2021; Ryu, Fan, 2023), such as metabolic syndrome that causes glucose and body fat disorders (Duarte et al., 2014; Schlosser, 2001); emotional problems derived from interpersonal conflicts within the home (Duarte et al., 2014); as well as difficulties when managing personal finances for issues related to the management of credit cards, retirement plans and savings (Tyson, 2006), the use of banking and more electronic means (Arduino, Peñaloza, 2018), that is, the lack of appropriate behaviors affect the well-being of a person.

As studies on well-being have been covered, a comprehensive vision is manifested when the objective and subjective well-being of individuals is considered, the first being defined by specialists by taking into account necessary factors at a social level and the second focusing on the particular experience around the appreciation of each individual (INEGI, n.d.); Likewise, the current trend in the concept and measurement of financial well-being seeks to recognize the interdependence of the individual and society, identifying both objective and subjective components in this variable (Brüggen et al., 2017; Maggli et al., 2021). The objective of this research is to analyze the impact of financial behavior on the objective and subjective financial well-being of Mexicans and identify if this relationship differs depending on gender.

Theoretical framework

To analyze human behavior, a lot of contributions from different areas of knowledge must be considered since individuals react to external and internal stimuli. That is, there is an impulse in people to attend to their needs. Behavior is related to the biological, cognitive, and social spheres, spheres that could also be considered dimensions in everyone's life (Engel, 1977). To understand human behavior, the analysis must consider theories focused on psychology, as well as learning and motivation theories.

In psychological theory, personality shapes how human beings organise their ideas and perceptions based on their interactions with the world (Montaño et al., 2009). Thus, the situations experienced also define the learning process and, therefore, how to act under the circumstances. About the theories of the psychological model the following stand out: Psychodynamic theories, where personality describes behavior by means of three structures: It, ego and super ego (Freud, 1967), which will intervene in the decision making according to people needs and their reflective processes; the Phenomenological theory of personality, which explains the behavior of human beings through a self-motivating component with a positive tendency, it means, that all individuals possess a tendency to achievement but must cultivate it to obtain the maximum potential, otherwise they self-injure by inhibiting it (Rogers, 1959); the Trait theory (Catell, 1943), it explains personality on the particularities of each human being (abilities, temperament and adaptability); the Behavioral Theory, which states that the environment shapes the individual and that the individual behaves following patterns of his learning (Skinner, 1971); the Cognitive theory, which translates personality as a three-dimensional scheme in which cognition, learning and the environment interact to analyze the situations, allowing a person to modify behavior, that is, to process a stimulus in order to associate a behavior in response (Bandura, 1977); and, finally, the Integrating theory, which proposes broad models to explain the relationship between temperament, character and intelligence (Lluís, 2002).

Among the most representative learning theories are behaviorism, constructivism, and cognitivism. In behavioral learning, the person is instructed using stimuli and reinforcement, which allow them to modify their behavior to associate their response with a positive or negative stimulus (Méndez-Mantuano et al., 2021; Reátegui et al., 2022; Skinner, 1971); Cognitivist learning emphasizes the process of knowledge development based on autonomous codification and storage of new information, thus there is an awareness of obtaining results through oriented reasoning

(Méndez-Mantuano et al., 2021; Piaget, 1976; Vigotsky, 1987); and, finally, the constructivist theory, which seeks that human beings learn by constructing their knowledge from their referents and the instructor acts as a mediator of learning environments (Piaget, 1976; Reátegui et al., 2022; Vigotsky, 1987).

The theories of motivation include the following: Maslow's hierarchy of needs theory (Maslow, 1943), Herzberg's two-factor theory (Herzberg, 1959), McClelland's three-needs theory (McClelland, 1961), and Alderfer's ERG theory (Alderfer, 1972). Each places special emphasis on how individuals will assume a hierarchy in the attention to their demands and share that, once organic needs are met, they escalate to the level of psychological needs. Only in the case of McClelland's theory are three types of motivational drives considered, which are classified according to the particular interest of the individual's sense of belonging. Herzberg, for his part, does not indicate a level but a balance between the two factors represented in his theory.

Likewise, human behavior and its understanding are also linked to the rationality that leads to decision-making. The theory of decision-making comes from the study of management science and takes the business environment as a reference, conceiving the decision as the unit of analysis within the company. This theory is based on cognitive psychology and tries to explain how the rational response process is formed, which will consider both internal and external information, as well as alternatives when evaluating the implications, to manage the best possible and feasible decision (Simon, 1947). In approaching the behavioral construct, some authors explain it in terms of attitudes, beliefs, and affective reactions (Ajzen, 1991; Sahni, 1994; Van der Plight et al., 1998), as well as from experience, knowledge, circumstances, and financial education (Duarte et al., 2014; Personal Finance Research Centre, 2005).

Research hypotheses

The objective dimension of well-being implies universal aspects inherent to human beings that are valued as standards to cover needs (Veenhoven, 2009). In the economic sphere, the objective dimension of well-being refers to aspects such as net liquid assets, net wealth, debt-to-assets ratio, debt-to-income ratio, and liquidity ratio (Halandová, 2024; Tenney, Kalenkoski, 2019). To assess financial well-being, it is recommended that at least three areas be considered: one to identify the ease with which individuals cover their payments on time and can respond financially to emergencies, another to analyze solvency and the ability to pay debts, and one more related to the accumulation of wealth.

Financial ratios are optimal for predicting and examining changes in the economy both in firms and within households (Baek, Devaney, 2004), therefore, some studies use the financial ratios of liquidity, debt-to-assets ratio, and investment to assess objective financial well-being (Garret, James, 2013; Tenney, Kalenkoski, 2019). Others associate objective financial well-being with the amount of savings, emergency funds, net worth, and debt level (Chang, 1994; Fitzsimmons, Leach, 1994; Godwin, 1994; Hefferan, 1982; Titus et al., 1989).

Finally, the Organization for Economic Cooperation and Development, to achieve a consensus on the conceptualization and measurement of financial well-being, exposes the complexity inherent to each context, institution, and country, and proposes the measurement of objective financial well-being through the capacity of income to meet the individual's needs and obligations; surplus income for making decisions about unplanned expenses or savings plans for the future; and total savings, access to credit and social security (OECD, 2024).

In this sense, behavior influences how people manage their finances (Wangi, Baskara, 2021) and the achievement of financial goals, in addition to how they assume their own financial education through the continuous management of information that allows them to make conscious decisions in favor of their financial resources (Aristei, Gallo, 2021). Based on the above, the first hypothesis of the study is proposed: H1. *Financial behavior is significantly and positively related to objective financial well-being*.

The characteristics of objective financial well-being have an impact on the overall well-being and satisfaction that people can perceive in their lives (Tenney, Kalenkoski, 2019). In terms of gender, men are more satisfied with their lives than women (Halandová, 2024). The OECD confirms that gender is associated with financial well-being, agreeing that men have higher financial well-being compared to women. (OECD, 2024). In this sense, the second hypothesis of the study arises: H2. *The relationship between financial behavior and objective financial well-being differs according to gender.*

The measure of subjective financial well-being includes financial satisfaction or satisfaction with certain financial aspects, such as being satisfied with the level of income and savings (Xiao, 2016). Mahdzan et al. (2019) define subjective financial well-being as perceived satisfaction with one's current financial situation, confidence and ability to cope with current and emergency expenses, and the ability to possess the financial freedom to do the things one likes to do and feel secure about one's future retirement. Financial satisfaction plays an important role in life satisfaction (Iramani, Lutfi, 2021). According to Xiao et al. (2013), there is a positive relationship between financial behavior and subjective financial well-being; that is, individuals who improve their financial behaviour tend to experience a higher level of subjective financial well-being than those who do not. Loo et al. (2023) argue that the relationship between financial behavior and subjective financial well-being is triggered by the locus of control, i.e., each individual's determination and belief that they are the ones who can manage their lives. Based on the above, the third hypothesis of the research is presented: H3. *Financial behavior is significantly and positively related to subjective financial well-being*.

There is evidence that the relationship between financial behavior and subjective financial well-being may differ by gender based on different personality traits (Fan et al., 2022; Zyphur et al., 2015), i.e., gender roles lead to different money management capabilities, in financial decision making and, therefore, in subjective financial well-being (Loo et al., 2023). Based on this evidence, the fourth and final research hypothesis is as follows: H4. *The relationship between financial behavior and subjective financial well-being differs by gender*.

2. Materials and Methods

Research design

Given the techniques used for data analysis and the purpose of its scope, the present research is a quantitative paradigm that seeks to generalize the results. Since the study provides an analysis of the relationship between objective and subjective financial well-being, financial behavior, and gender variables, it is considered descriptive.

Participants

The sample is a national one and comes from ENSAFI (INEGI 2023a). According to the ENSAFI methodology, the sampling was probabilistic and cross-sectional, as the respondents' participation was considered proportional to the size of the population (ranging from 3.0% to 3.3% according to the total population of each state) and was conducted from September 25 to November 17, 2023, specifically. The population studied included members of Mexican households, whose informants were of legal age. The eligibility criteria for the sample included individuals aged 18 years or older, of Mexican nationality, living in Mexico and residing in the surveyed household. It also included people from rural or urban localities who knew about all the household members.

Instrument

A survey made up of 10 sections (INEGI, CONDUSEF, 2023) is the research instrument. Table 1 presents the questions that were considered by the ENSAFI to obtain the data for the analysis.

Table 1. Variables of research and questions of the survey (ENSAFI)

Variables	ENSAFI questions
Gender	Informant gender (Woman, man)
Marital status	5.3 Do you currently... live with your partner in a free union? are you separated? divorced widowed married single
Economic dependents	5.8 How many of your children are financial dependents in the household? 5.9 Do you have children outside the home who are your economic dependents?

Variables	ENSAFI questions
	5.10 Do you have any other person who is financially dependent on you, such as a spouse or partner, parents, parents-in-law, grandchildren, among others, whether or not they live in the household?
Government financial support	5.11 Do you receive any economic support or government welfare programmes, such as senior citizens, or the Benito Juárez grant, among others?
Financial behavior	7.1 Do you keep records of your income and expenditure? 7.2 Do you: 7.2.1 record expenses? 7.2.2 keep the money for payments or debts separate from everyday spending money? 7.2.3 keep a record of outstanding bills or debts to remember to pay them. 7.2.4 use an application to manage money or expenses?
Objective financial wellbeing	7.7.1 Can you buy a gift without it being a problem for your finances? 7.7.2 Do you have money left over at the end of the month? 7.8.1 Can you cope with a major unforeseen expense? 7.8.5 Do you have enough money to cover your expenses?
Subjective financial wellbeing	7.7.4 Do you feel you can manage your finances without a problem? 7.8.3 Given your financial situation, do you feel you will have the things you desire? 7.8.4 Can you enjoy life because of the way you manage your money? 7.8.6 Do you feel confident that the money you have saved is sufficient?

Source: INEGI and CONDUSEF (2023) data

Data analysis

To carry out the statistical analysis, the financial behavior and objective and subjective financial well-being indexes were constructed for the general population and by gender as well. The indices were constructed as follows:

Objective financial well-being index. Following the approach proposed by the OECD (2023), 4 questions (7.7.1, 7.7.2, 7.8.1, and 7.8.5) from the ENSAFI (INEGI, 2023c) were used, which are answered on a five-point Likert scale. In this way, the objective financial well-being score took values between 4 and 20. The indicator was normalized, taking values between zero and one hundred for a more intuitive interpretation. Therefore, the closer it is to zero, the worse the objective financial well-being level will be and the closer it is to one hundred, the better the objective financial well-being level will be.

Subjective financial well-being index. Taking the OECD (2023) approach as a reference, 4 questions (7.7.4, 7.8.3, 7.8.4 and 7.8.6) from the ENSAFI (INEGI, 2023c) were used. These are answered on a five-point Likert scale. Thus, the subjective financial well-being score took values between 4 and 20. The indicator was normalized at 100 for a more intuitive interpretation. The closer it is to one hundred, the better the level of subjective financial well-being.

Financial behavior index. To construct the financial behavior indicator, a scale consisting of five questions (7.1, 7.2.1, 7.2.2, 7.2.3, and 7.2.4) from ENSAFI (INEGI, 2023c) was used, which measures the control people have over their income and expenses. The answers are dichotomous: they are answered only with a “yes” or “no”. A value of 1 was assigned for affirmative answers and 0 for negative ones. Therefore, the financial behavior score ranges between 0 and 5 points. The indicator was adjusted to a scale of 100, the closer the result is to one hundred, the better the behavior.

Once the financial behavior index was estimated, its relationship with the objective and subjective financial well-being indexes was evaluated. The same operation was done considering the male and female populations separately. The hypotheses suggest the existence of a positive relationship between behavior and financial well-being (objective and subjective) and gender differences in their magnitude and correlation. To contrast, the correlation between the behavior and financial well-being indexes was first evaluated, and then a Logit regression model was estimated. For the estimation, the Gretl statistical package was used, version May 2024.

For the estimation of the Logit model, a value of 1 was assigned to people who had a high level of objective/subjective financial well-being and a value of 0 to those who had a low level of objective/subjective financial well-being. The mean objective/subjective financial well-being index was used to separate the two groups: people who had a level of objective/subjective financial well-being below the mean were classified as having low objective/subjective financial well-being; while people who had a level of objective/subjective financial well-being above the mean were classified as having high objective/subjective financial well-being. The same procedure was carried out separately for women and men. Age, marital status, dependents, and government financial support were used as control variables.

The general regression model proposed took the following form:

$FinanWB_i = \beta_0 + \beta_1 (FinanBehav_i) + \beta_2 (Age_i) + \beta_3 (Gender_i) + \beta_4 (FreeUnion_i) + \beta_5 (Separated_i) + \beta_6 (Divorced_i) + \beta_7 (Widowed_i) + \beta_8 (Married_i) + \beta_9 (Dependant_i) + \beta_{10} (Support_i) + \mu_i$

Where (for person *i*):

$FinanWB_i$ = Probability of having a high financial well-being level (objective/subjective). 1 if the financial well-being index level (objective/subjective) on a 100-point scale is above the average; 0 otherwise.

$FinanBehav_i$ = Financial behavior index on a 100-point scale.

Age_i = How old the person is at the time of the survey

$Gender_i$ = 1 if the person is a woman; 0 if the person is a man.

$FreeUnion_i$ = 1 if the person is in a free union or lives with his/her partner; 0 otherwise.

$Separated_i$ = 1 if the person is separated; 0 otherwise.

$Divorced_i$ = 1 if the person is divorced; 0 otherwise.

$Widowed_i$ = 1 if the person is widowed; 0 otherwise.

$Married_i$ = 1 if the person is married; 0 otherwise.

$Dependent_i$ = 1 if the person has dependents; 0 otherwise.

$Support_i$ = 1 if the person receives financial support from the government; 0 otherwise.

μ = Error term.

Given the econometric specification, the work hypotheses translate into testing the signs of the coefficients β1 for all models (for the general population, the male population, and the female population), which are expected to be positive. That is, the higher the levels of financial behavior, the higher the levels of objective/subjective financial well-being. Likewise, it will be observed whether there are differences in the marginal effect of the β1 coefficient between objective and subjective financial well-being and also between the groups of men and women separately.

4. Results

Descriptive analysis

Table 2 shows the sociodemographic and economic aspects of the respondents.

Table 2. Sociodemographic and economic characteristics of the sample

Variable	Indicator	N= 20448	%
Gender	Male	9175	44.9
	Female	11273	55.1
Marital status	Free union	4141	20.3
	Separated	2105	10.3
	Divorced	776	3.8
	Widowed	1759	8.6
	Married	7390	36.1
	Single	4277	20.9
Economic dependents	Yes	11772	57.6
	No	8625	42.2
	Not specified	51	.2
Financial support	Yes	4053	19.8
	No	16395	80.2

The sample is made up of 20,448 participants whose ages range between 18 and 98 years of age, from the 32 states in Mexico. As for the gender variable, it is observed in the above table that the majority of the participants are women (55.1 %). Regarding their marital status, the majority are married (36.1 %), followed by singles (20.9 %) and people in a free union (20.3 %). Most of them have people in their care (57.6 %) and around 20 % of the participants reported having financial support.

Table 3 presents the descriptive statistics for the objective and subjective financial well-being and financial behavior indexes, normalized at 100.

Table 3. Descriptive indicators of the indices

Indexes	**General**	**Female**	**Male**
Objective financial well-being			
Mean	58.9	57.2	60.9
Standard deviation	18.57	18.19	18.83
Subjective financial well-being			
Mean	61.8	60.3	63.5
Standard deviation	19.13	19.02	19.11
Financial behavior			
Mean	26.0	26.5	25.3
Standard deviation	30.59	30.47	30.73

When observing the mean of the indexes, it can be noted that subjective financial well-being is greater than objective in all cases, which emphasizes that the satisfaction and perception people have about their financial situation and money management are greater than their ability to manage and administer their finances and liquidity.

Although both men and women register a greater subjective financial well-being than an objective one, there are differences between both groups. The financial well-being (objective and subjective) of men is greater than that of women. In the case of subjective financial well-being, the difference is 3.2 points, while for objective financial well-being, the difference is 3.7 points.

On the financial behavior side, the women's financial behavior indicator is relatively higher than that of men (with a difference of 1.2 points). Although women's financial behavior is higher than that of men, they report lower levels of financial well-being. This fact could suggest that there are factors beyond financial behavior that sustain gender inequality in financial well-being.

Objective and subjective well-being and financial behavior

Table 4 shows the Pearson correlation coefficient values obtained for the well-being and financial behavior indexes examined.

It can be observed that the correlation between objective and subjective financial well-being is high, which emphasizes the link between both dimensions of well-being. Regarding hypotheses 1 and 3 raised in the work, the results show a positive and significant correlation ($p \leq 0.01$) between the two dimensions of financial well-being and financial behavior. It is also observed that the financial behavior correlation with objective financial well-being is relatively higher than that with subjective financial well-being, which suggests that financial behavior is more associated with people's ability to manage their finances than with satisfaction and perception of their financial situation.

Table 4. Indexes correlation

Variable	Objective	Subjective	Financial
Objective financial well-	1		
Subjective financial	0.560**	1	
Financial behavior	0.272**	0.253**	1

Notes: ***p* ≤ .01; N = 20448. Bilateral correlation.

Tables 5 and Table 6 present the same correlation exercise, but consider only the female and male populations, respectively.

Table 5. Correlation of female indexes

Variable	Objective	Subjective	Financial
Objective financial well-	1		
Subjective financial well-	0.565**	1	
Financial behavior	0.259**	0.231**	1

Notes: ***p* ≤ .01; N = 11273. Bilateral correlation

Table 6. Correlation of male indexes

Variable	Objective financial	Subjective	Financial
Objective financial well-	1		
Subjective financial well-	0.550**	1	
Financial behavior	0.295**	0.284**	1

Notes: ***p* ≤ .01; N = 9175. Bilateral correlation

It can be observed that, although financial behavior shows a positive and significant correlation (p ≤ 0.01) with the two financial well-being dimensions for men and women, in both cases, the correlation with objective well-being is relatively higher than with subjective well-being. This fact reaffirms the importance of the link between financial behavior and people's ability to manage their finances. The tables also show that the financial behavior correlation with the two dimensions of financial well-being is higher for men compared to women, which provides evidence to the hypotheses regarding the gender difference and suggests that men's financial behaviors would be relatively more associated with financial well-being than women's financial behaviors.

Table 7 shows the results of the six estimated Logit models. All models consider subjective and objective financial well-being as dependent variables. However, models 1 and 2 are estimated with the entire population, models 3 and 4 only record the female population, while the last two models take into account the male population only.

Table 7. Logit estimation of objective and subjective financial well-being. Marginal effects

	(1) Objective financial well-being	**(2) Subjective financial well-being**	**(3) Objective financial well-being of women**	**(4) Subjective financial well-being of women**	**(5) Objective financial well-being of men**	**(6) Objective financial well-being of men**
Financial behavior	0.0044* (0.0005)	0.0042* (0.0005)	0.0040* (0.0006)	0.0037* (0.0006)	0.0049* (0.0008)	0.0048* (0.0007)
Age	−0.0052* (0.0012)	−0.0028* (0.0011)	−0.0049* (0.0016)	−0.0027* (0.0016)	−0.0057* (0.0018)	−0.0031* (0.0018)
Gender (Men)						
Women	−0.1061* (0.0305)	−0.0819* (0.0299)				
Marital status (Single)						
Free union	−0.0318* (0.0514)	−0.0196 (0.0504)	−0.0268 (0.0682)	0.0007 (0.0672)	−0.0456* (0.0793)	−0.0534* (0.0772)
Separated	−0.0627* (0.0613)	−0.0643* (0.0610)	−0.0995* (0.0797)	−0.0874* (0.0799)	−0.0038 (0.0972)	−0.0266 (0.0953)
Divorced	−0.0234 (0.0868)	−0.0104 (0.0858)	−0.0654* (0.1123)	−0.0388 (0.1116)	0.0364 (0.1379)	0.0318 (0.1351)
Widowed	−0.0169 (0.0726)	0.0057 (0.0712)	−0.0570* (0.0895)	−0.0129 (0.0881)	0.0495 (0.1278)	0.0356 (0.1257)

Married	−0.0083 (0.0496)	0.0095 (0.0487)	−0.0318* (0.0648)	0.0014 (0.0640)	0.0120 (0.0780)	0.0094 (0.0759)
Economic dependents (Without)						
With dependents	−0.0633* (0.0355)	−0.0808* (0.0349)	−0.0816* (0.0469)	−0.0930* (0.0464)	−0.0316* (0.0559)	−0.0559* (0.0547)
Government financial support (Without)						
With Support	−0.0088 (0.0436)	0.0335* (0.0432)	−0.0168 (0.0557)	0.0281 (0.0552)	0.0068 (0.0710)	0.0427* (0.0701)
Constant	1.0513	0.3259	0.7305	0.0767	0.9651	0.2417
R^2 McFadden	0.0852	0.0601	0.0743	0.0500	0.0913	0.0691
Likelihood ratio test	$\chi^2(10) =$ 2413.79 [0.0000]	$\chi^2(10) =$ 1700.26 [0.0000]	$\chi^2(9) =$ 1160.51 [0.0000]	$\chi^2(9) =$ 774.08 [0.0000]	$\chi^2(9) =$ 1145.95 [0.0000]	$\chi^2(9) =$ 880.06 [0.0000]
N	20448	20448	11273	11273	9175	9175

Notes: *p ≤ .05. The marginal effect is presented for each variable. In parentheses, reference groups and standard errors.

The estimates obtained in the six models indicate a positive and significant relationship between financial behavior and the probability of having a high financial well-being level, both objective and subjective ($p \leq 0.05$). This fact provides evidence in favor of hypotheses 1 and 3 and corroborates the importance of the practices people carry out regarding the recording and control of their income and expenses with their financial well-being. However, the marginal contributions of financial behavior are different. The results of models 1 and 2 show that the marginal effect of the financial behavior index on the probability that people have a high financial well-being level is relatively larger in the objective dimension than in the subjective one. The marginal effect on subjective financial well-being is 0.42 % while on objective financial well-being, it is 0.44 %. The results of models 1 and 2 also show that the probability of having a high financial well-being level (both objective and subjective) is lower and significant ($p \leq 0.05$) for women. This inequality in women's financial well-being compared to that of men's is not evenly distributed across the two financial well-being dimensions. It can be noted that the negative marginal effect is 10.61 % for the objective dimension and 8.19 % for the subjective dimension, suggesting that the largest difference between men and women is associated with their ability to manage finances.

The gender difference in financial well-being can also be seen by examining the relationship between women's and men's financial behavior with their respective subjective and objective financial well-being. Models 3 to 6 indicate that the marginal effect of men's financial behavior is greater than that of women's in both financial well-being dimensions. It can also be noted that, although the marginal effect of financial behavior in both men and women is greater for objective financial well-being in relation to subjective financial well-being, the difference is less pronounced in the case of men (the marginal effect of financial behavior in men is 0.48 % for subjective financial well-being and 0.49 % for objective financial well-being, while for women it is 0.37 % for the subjective dimension and 0.40 % for the objective dimension). These results suggest, on the one hand, that the link between financial behavior and financial well-being (objective and subjective) is relatively more pronounced for men than women; and, on the other hand, that the gap of financial behavior and financial well-being relationship (objective and subjective) is more prominent in women. Both of these findings emphasize the unequal effects of financial behavior on the financial well-being of men and women and support hypotheses 2 and 4 of the study, suggesting that men's financial behaviors may have a relatively stronger relationship with financial well-being compared to those of women.

Table 7 also illustrates the impact of the remaining demographic variables examined: age, marital status, dependents, and government financial support. Considering the results of models 1 and 2, the probability of having a high financial well-being level (objective and subjective) is lower and significant ($p \leq 0.05$) when one is older. However, the marginal effects are different.

The negative marginal effect of age is larger in the financial well-being objective dimension compared to the subjective one (0.52 % and 0.28 % respectively).

Regarding marital status, living in a free union and being separated were significantly negatively associated with the probability of keeping a high objective financial well-being level. Meanwhile, the separated status showed a negative and significant association with subjective financial well-being (in all cases, the reference base group was the single marital status). Having dependents, as expected, showed a significant, consistent, and negative relationship with the probability of keeping high objective and subjective financial well-being levels ($p \leq 0.05$). However, government financial support showed a significant and positive relationship only with subjective financial well-being ($p \leq 0.05$). The social cash transfer programmes implemented in recent years in Mexico have contributed to increasing the financial well-being of the population, but mainly in the subjective dimension, that is, the satisfaction of a better financial situation, but without significantly influencing the ability to manage resources. When dividing the population between men and women, models 3 to 6 show that there are gender differences in the influence that the different demographic variables have on financial well-being.

Age shows a greater negative and significant marginal effect ($p \leq 0.05$) in the objective component of financial well-being for both, men and women. However, the marginal effect in women (0.49 %) is smaller than in men (0.57 %), which could suggest that age reduces objective financial well-being relatively more in the male population. Regarding marital status, those who are separated show a significant negative relationship with the probability of having a high subjective financial well-being level for women ($p \leq 0.05$), while being separated, divorced, widowed, or married (all compared to being single) show a significant negative association with the probability of keeping a high objective financial well-being level ($p \leq 0.05$). In the case of men, only those living in free union (compared to being single) show a significant negative association with the probability of having a high financial well-being level, both objective and subjective ($p \leq 0.05$).

Even though having dependents shows, for both men and women, a clear and consistent significant negative relationship with objective and subjective financial well-being ($p \leq 0.05$), it can be noted that the marginal effects are ostensibly greater among the female population. This fact could emphasize women's financial vulnerability related to the division of chores within households.

Finally, when separating the effects of government economic support on financial well-being by gender, models 3 to 6 show that it is only the male population and only in the subjective dimension of financial well-being where a significant and positive relationship is found ($p \leq 0.05$). This last fact suggests that, although social cash transfer programmes have helped improve the financial well-being of the population in Mexico, their contribution has been greater for the male segment of the population and less for the female segment.

5. Discussion

The study suggested that financial behavior is significantly and positively related to objective and subjective financial well-being and that the relationship between financial behavior and objective and subjective financial well-being differs by gender. The results confirmed the existence of a positive and significant relationship between the two dimensions of financial well-being and financial behavior, which is consistent with most of the current literature (Dare et al., 2023; Falahati et al., 2012; Fan, Henager, 2022; Maggli et al., 2021; Mahendru et al., 2022; Xiao et al., 2013) and highlight the importance of maintaining positive financial behaviors related to planning and controlling income, expenses, savings, and debts; particularly in the context of a Latin American country like Mexico, with relatively low financial behavior indicators (SHCP, 2019).

Similarly, it was found that financial behavior's impact on financial well-being is greater in the objective dimension than in the subjective one. This finding is consistent with some previous studies (Erner et al., 2016; Gardarsdóttir, Dittmar, 2012) and suggests that financial behavior is more closely linked to people's ability to manage their economic resources than to their satisfaction or perception of their financial situation and their money management.

The results also showed significant evidence that the levels of both objective and subjective financial well-being are lower for the female population compared to the male one, and that this difference is more pronounced in the objective dimension. The results are consistent with different studies that indicate that women have less financial well-being than men (Delafrooz, Paim, 2011; Gerrans et al., 2014; Gutter, Copur, 2011; Salignac et al., 2020) and suggest that the disparity between women's and men's financial well-being would be associated with factors related to the ability to manage their finances. It is also found that the link between financial behavior and financial well-being (objective and subjective) is relatively more pronounced for men than for women, which would reaffirm the idea that financial behaviors could have a relatively closer relationship with financial well-being in men compared to women. Furthermore, this research has provided enough evidence on the existence of gender differences that influence various demographic factors on financial well-being, particularly within the Latin American context. The research shows that age is negatively related to the objective and subjective financial well-being of men and women, which contrasts with studies that indicate a positive relationship between age and financial well-being (Collins, Urban, 2019; Zaimah, 2019). However, it agrees with another part of the literature that observes a negative relationship, indicating that age would be linked to cognitive decline, which could lead to poor financial decisions and therefore reduce financial well-being (Finke et al., 2017; Tenney, Kalenkoski, 2019). The findings also show that the age negative effect occurs mainly in the objective component of financial well-being, but the impact is relatively more pronounced in the male population compared to the female one.

As for marital status, the results appear to align with findings from various studies, which indicate that being married is positively related to financial well-being. This is because married individuals tend to take on more responsibilities, which encourages them to manage their finances more effectively. Therefore, their financial well-being is greater (Delafrooz, Paim, 2011; Headey, Wooden, 2004; Iramani, Lutfi, 2021; Porter, Garman, 1993; Sahi, 2013). Having dependents shows a clear and consistent negative association with objective and subjective financial well-being, which is consistent with the existing literature. This indicates that the number of dependents reduces financial well-being because people acquire more expenses and require higher income (Hong, Swanson, 1995; Iramani, Lutfi, 2021). Finally, regarding government financial support, the existing literature points out the positive influence that government conditional and unconditional cash transfer programmes have on people's financial satisfaction and well-being (Campara et al., 2017; Haushofer et al., 2020; Lloyd-Sherlock et al., 2012; Pilkauskas et al., 2023; Romero et al., 2021). However, this study, by separating financial well-being into its objective and subjective dimensions, has found that the positive influence of government economic support occurs only in the subjective component and, mainly, in the financial well-being of the male population. This suggests, on the one hand, that social cash transfer programmes have helped improve the financial well-being of the population in Mexico, but their contribution has been greater for the male population and lower for the female population. On the other hand, the increase in financial well-being has been in financial situation satisfaction, but without significantly influencing the capacity to manage resources. These results are even more relevant for the case of Mexico since the government has implemented priority social programmes in the last six years that involve unconditional monetary transfers to different population segments.

6. Conclusion

Based on the study results, it is concluded that financial behavior is positively and significantly related to both dimensions of financial well-being, with the relationship being greater for the objective dimension. This means that the research results provide evidence that financial behavior is closely related to economic resources management (economic well-being) and not so much to how individuals feel or visualize themselves (psychological/emotional well-being). Regarding gender, Mexican women present lower financial well-being levels in both the objective and subjective dimensions compared to men, with the gap being greater in the objective dimension. The study reveals that financial behaviors maintain a closer relationship with financial well-being in men compared to women, which emphasizes the need to financially educate this group. It also considers that the housework women perform requires time, which limits their participation in the formal financial market as well as developing skills necessary to exercise informed financial decision-making (Struckell et al., 2022). Understanding the differences between men and women requires analyzing biological, psychological, and socio-environmental factors, that is, a biopsychosocial perspective. For example, culture and social norms can contribute to individuals having a marked role in financial decision-making according to gender (Aristei, Gallo, 2021; Botazzi, Lusardi, 2020; Rink et al., 2021), as well as the division of chores within households (Hsu, 2016) and financial socialization in an extended family environment through parents (Botazzi, Lusardi, 2020; Chuliá et al., 2022). The research results show that the ability to manage economic resources is still an area of opportunity in the Mexican population in general. By increasing this capacity, the population's economic and perceived well-being improves, especially in women who are the most vulnerable. If a person maintains responsible practices with their income and expense control, as well as in the way of controlling said expenses, they will achieve a better use of their financial resources and, therefore, a correct administration of their money, which will contribute to appropriate financial health.

7. Declarations

Consent for publication

Not applicable.

Availability of data and materials

The data used in the analysis can be found at: https://www.inegi.org.mx/ programas/ensafi/2023/

Conflict of interest statement

The authors report no conflicts of interest.

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