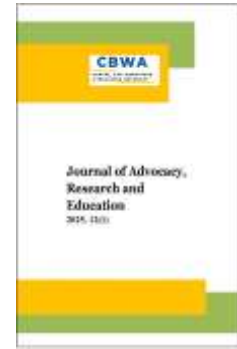




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## Financial Capabilities and Their Relationship with Financial Well-being: Are There Gender Differences?

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### Abstract

The objective of this study was to explore the relationship between financial capabilities and financial well-being, as well as to determine whether this relationship is moderated by the variable – gender. This study utilised quantitative, correlational, and predictive design with a cross-sectional approach, where data were collected at a single point in time. The sample consisted of 345 participants over the age of 18, preferably from the workforce and higher education students, selected through a non-probability self-selection sampling method. Data were obtained through an online questionnaire and analysed using the PROCESS macro in SPSS, specifically Hayes' Model 1, to assess the moderation of gender in the relationship between financial capabilities (X) and financial well-being (Y). The analysis revealed that, overall, financial capabilities have a significant and positive impact on financial well-being, with this relationship being particularly relevant for participants of both genders. However, the results indicated that gender does not exert a significant moderating influence on this relationship, as the interaction term between financial capabilities and gender did not reach an adequate level of significance ( $p=0.069$ ). Despite this, it was observed that women tend to report higher financial well-being as their financial capabilities increase, compared to men. This difference in the relationship between financial capabilities and well-being was significant when analysing the conditional effects of gender. Through this study, it is concluded that financial capabilities are a key predictor of financial well-being, but gender does not significantly moderate this relationship. Nevertheless, the influence of gender on the perception of financial well-being suggests that social or cultural factors might be intervening, which opens a space for future research to explore how other variables may affect the relationship between these two dimensions. Furthermore, the findings underscore the importance of promoting financial education as a vital factor in enhancing the financial well-being of all individuals, regardless of gender.

**Keywords:** Financial Education, Financial well-being, Financial Capabilities, Gender.

### 1. Introduction

Financial education is crucial for economic well-being, enabling individuals to make informed decisions about their finances. The lack of financial education can lead to suboptimal

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decisions in key areas such as saving, investing, and debt management, directly impacting financial security (García-Santillán, 2024; Lusardi, Mitchell, 2014). In this context, financial capability is the ability to manage economic resources effectively, which is closely linked to financial well-being. According to Brügger et al. (2017), financial well-being refers to an individual's perception of their desired standard of living and future financial freedom derived from proper management of financial resources. Gender differences play an important role in this area (del Carmen Briano-Turrent et al., 2024). Research has shown that women tend to be more conservative in their financial decisions, showing less confidence in their financial knowledge compared to men (Joo, Grable, 2004). This lack of confidence and a greater reluctance to take risks can limit women's ability to accumulate wealth and make strategic investment decisions, directly impacting their financial well-being. Furthermore, according to the study by Gignac et al. (2024), women with high financial literacy and homeownership have significantly higher financial well-being, as they are able to avoid over-indebtedness and manage their resources more effectively.

In this sense, financial knowledge and capabilities are crucial to individuals' well-being. A longitudinal study by Xiao et al. (2024) reveals that financial capability indices, which include both financial knowledge and desirable financial behaviors, are positively related to financial well-being over time. This highlights the importance of both men and women improving their financial capability in order to manage their finances better and achieve sustainable financial well-being. Financial advice also plays a key role in economic decision-making. As shown in the works of Agarwal et al. (2009) and Lusardi and Mitchell (2011a, 2011b), people with greater financial knowledge are more likely to seek external advice and achieve better financial outcomes. However, financial literacy is essential to effectively take advantage of this advice. Due to their lower financial literacy, women may face barriers to accessing recommendations from financial advisors, which limits their ability to improve their financial well-being.

Finally, financial stress negatively affects individuals' economic well-being. According to Kelley et al. (2023), fluctuations in financial stress during the pandemic had a profound impact on family relationships and financial behaviors, exacerbating economic difficulties. Improving financial education and stress management is crucial for mitigating these effects and enhancing financial well-being, particularly among individuals with limited educational or financial resources.

### ***Preliminary Hypothesis***

Considering that financial capabilities significantly influence financial well-being, as greater financial knowledge and skills contribute to better resource management and greater long-term economic security, it is hypothesised that women, due to lower financial literacy and higher risk aversion, experience lower financial well-being compared to men. This hypothesis highlights the need for specific educational programs that address these gender differences. Thus, the following research question: Under what circumstances does a causal relationship exist between well-being and financial capabilities? That is, is the causal relationship between well-being and financial capabilities mediated by the gender of the participants? Therefore, the following hypothesis is proposed: *H1: The gender of the participants will mediate the relationship between their financial capability and financial well-being, such that women with higher financial capability will have greater financial well-being compared to men.*

### **2. Review of Literature**

Based on the key variables that form the core of the research questions, objectives, and hypotheses to be tested in this study, which are represented in the conceptual model of the empirical study described in Figure 1, the following is a theoretical analysis of the following concepts: financial capabilities, financial well-being, and gender differences.

#### ***Financial capabilities and financial well-being***

In the field of financial well-being, it is essential to establish a clear definition that allows us to understand its scope and origin. According to Brügger et al. (2017), financial well-being is an individual's perception of the desired standard of living and future financial freedom. This well-being has its roots in the proper management of personal financial resources, which is closely linked to individuals' financial capability. While the relationship between financial capability and financial well-being has been widely researched, few studies have adopted a longitudinal approach with long-term national data. Xiao et al. (2024) addressed this gap by utilising data from five waves of the National Financial Capability Study (NFCS) between 2009 and 2021, revealing a positive

relationship between financial capability indices and financial well-being, with a focus on the significance of subjective financial knowledge and positive financial behaviors. Abdul et al. (2024) explored how parental financial socialisation strategies, especially with daughters, influence the financial well-being of Generation Z. Additionally, Gignac et al. (2024) investigated the impact of homeownership on the financial well-being of older adults in Australia, finding that combining homeownership with high financial literacy enhances financial well-being by reducing the risk of over-indebtedness.

In terms of public health approaches, Nykiforuk et al. (2023) proposed strategies to mitigate financial strain from the COVID-19 pandemic, which would help reduce inequalities in financial health. Globally, El Anshasy et al. (2023) found that negative perceptions of financial well-being could promote migration, particularly among those with a pessimistic view of the future economic outlook. This finding aligns with the work of Morrissey et al. (2023), who demonstrated that childhood economic hardship has a negative impact on mental well-being in adulthood, particularly during midlife. Karthika et al. (2023) noted that financial well-being is dependent on pension systems and access to healthcare services in old age. In different contexts, other studies also address financial well-being. For example, Nasr et al. (2024) documented how the economic crisis in Lebanon profoundly affected the well-being of university students, resulting in financial stress. Furthermore, cultural differences in understanding financial well-being highlighted the need to adapt measurement tools to these contexts (Sollis et al., 2024).

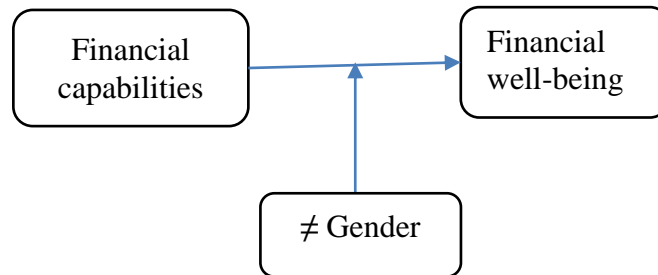
The pandemic crisis brought significant visibility to financial stress, as evidenced by Kelley et al. (2023), who demonstrated how the variability of financial stress during the pandemic affected both family relationships and economic behaviour. Zhang and Fan (2024) explored how excessive use of fintechs can negatively affect both financial behaviour and well-being. Regarding gender, Hasan et al. (2024) analysed how social class and gender influence financial well-being in Bangladesh, concluding that health is the primary determinant of this well-being, followed by financial status. Mundi et al. (2024) find that retirees with fixed pensions and high social capital enjoy greater financial well-being in India. Kim and Lee (2024) investigated how student loans in the U.S. affected financial well-being during the pandemic, noting an increase in financial anxiety and payment delinquency.

On the other hand, Birkenmaier et al. (2023) suggested that having a positive perception of the financial situation can counteract the adverse effects of a low credit score, favouring sustainable financial well-being. In this context, the adoption of Industry 4.0 technologies appears to have a positive impact on financial well-being, as indicated in a study by Wan Ismail et al. (2024), which examined how this adoption affects employees' social and financial well-being in Malaysia. Additionally, Gafoor and Amilan (2024) highlighted how fintech adoption improved both financial capability and the well-being of people with disabilities, facilitating access to financial services and emphasising the fundamental role of financial knowledge. Regarding specific socio-economic groups, Rahman et al. (2021) analysed financial well-being in the B40 group in Malaysia, concluding that improving financial education and managing stress are essential to enhancing this group's financial well-being. Algarni et al. (2024) emphasised the crucial role of parental financial socialisation in the well-being of young Saudis. Dhiraj et al. (2023) found that financial stress in the tourism sector in India is inversely related to employees' financial well-being, suggesting that improving stress management could increase financial quality of life. Similarly, Bashir et al. (2024) investigated the impact of financial well-being on labour productivity, finding more pronounced effects in men than in women. Finally, She et al. (2023) suggested that greater clarity in financial goals and better knowledge contribute positively to financial well-being among Chinese millennials.

All these studies highlighted the importance of financial education, stress reduction, and access to new technologies as essential factors for improving financial well-being. On the other hand, several studies supported the hypothesis that financial capabilities significantly impact financial well-being. For example, Xiao et al. (2024) demonstrated a positive relationship between financial capability indices and financial well-being over time, emphasising the crucial role of financial knowledge and appropriate financial behaviors. Similarly, Gignac et al. (2024) found that combining financial literacy and homeownership improved financial well-being, further emphasising the importance of financial capabilities. Likewise, Zhang and Fan (2024) suggested that financial literacy acts as a mediator between Fintech use and financial well-being, indicating that good financial knowledge is essential for improving well-being. In agreement, Hasan et al.

(2024) argued that financial capabilities are key factors in achieving well-being, as they influence the proper management of personal finances.

Finally, Kim and Lee (2024) reveal that a lack of financial skills, as observed among student loan borrowers, increases financial anxiety and deteriorates financial well-being, thereby reinforcing the relationship between financial capabilities and financial well-being. Based on the arguments presented in the review of the literature related to the variables of the conceptual model illustrated in Figure 1, the following hypothesis is proposed: H1: *The gender of the participants will mediate the relationship between their financial capability and financial well-being, such that women with higher financial capability will have greater financial well-being compared to men.*



**Fig. 1.** Conceptual model (own)

### 3. Methods and Materials

#### Design

The study employs a quantitative design, specifically a correlational and predictive type, intending to explore the relationship between financial capabilities and financial well-being, as well as determining whether the variable of gender moderates this relationship. This study adopts a cross-sectional approach, where data is collected at a single time point, allowing the examination of relationships between the variables of interest.

#### Participants and sample

The target population consists of individuals aged 18 and above, preferably from the workforce, as well as students from higher education levels across different regions. The purpose of this selection is to obtain a preliminary global view of the behaviours related to the topics addressed in the study, which are part of the conceptual model and the instrument used for data collection. The sample was obtained through a non-probabilistic self-selection sampling method, with a total of 345 cases. An electronic format, utilising Google Forms, was employed for data collection, thereby facilitating the participation of as many individuals as possible.

#### Variables

The analysis focuses on three main variables:

**Financial Capabilities (X):** This variable reflects participants' skills, knowledge, and behaviors related to financial management.

**Financial Well-being (Y):** This variable reflects participants' perception of their financial situation and their general well-being in this regard.

**Gender (M):** This is considered a moderating variable. Participants will be classified by gender.

#### Procedure for Data Measurement – Moderation

To answer the question: Under what circumstances does the causal relationship between financial well-being and financial capabilities occur? That is, does participants' sex mediate the causal relationship between financial well-being and financial capabilities? Moderation, in statistical analysis, refers to a situation in which the relationship between an independent variable (predictor) and a dependent variable (criterion) is influenced by a third variable, known as the moderator. In other words, moderation occurs when the relationship between the independent variable and the dependent variable changes based on the level or value of the moderator variable. To analyse the data, the PROCESS macro in SPSS was used, specifically employing Hayes' PROCESS macro, which allows for mediation and moderation analyses. In this study, Model 1 of



PROCESS will be used to analyse the moderation of the gender variable in the relationship between financial capabilities (X) and financial well-being (Y).

The moderation model to be implemented is as follows:

$$Y = b_0 + b_1X + b_2M + b_3(X * M) + e$$

Where:

Y = Financial Well-being (dependent variable),

X = Financial Capabilities (independent variable),

M = gender (moderator variable),

$X \times M$  = Interaction term between financial capabilities and gender.

The interaction coefficient ( $X \times M$ ) will be the main indicator of moderation. If this coefficient is significant, it will be interpreted to mean that the relationship between financial capabilities and financial well-being varies by gender. Regression coefficients and 95% confidence intervals will be analysed to determine the significance and magnitude of the moderating effect. Additionally, simple slope tests will be conducted to understand better how the relationship between financial capabilities and financial well-being varies by gender (i.e., comparing the effects for men and women).

### **Ethical Approval**

This study was approved by the Ethics Committee of the School of Business at UCC, Cristóbal Colón University (Project ID P-03/2025), and by the Ethics Code for Research from the Division of Graduate Studies and Research at the National Technological Institute of Mexico. The principles set out in the Declaration of Helsinki were followed throughout the process. The objectives and procedures of the study were clearly explained to participants during the administration of the questionnaire, ensuring their confidentiality and anonymity. Informed consent was obtained from all participants after they had read and understood the provided instructions and statements.

### **Instrument**

The questionnaire used consists of three sections. The first section collects data on the socio-demographic profile of the participants (García-Santillán et al., 2024). The second section covers dimensions of Financial Capabilities based on a scale adapted by Elayah and Tufail (2024) from previous studies. Financial Capabilities were measured with five questions (Khan et al., 2022). Regarding Financial Well-being, which consists of eight perception indicators, the framework is based on the work of BBVA (2020), in collaboration with the BBVA Financial Education and Capabilities Center and the Center for Financial Services Innovation (CFSI). The survey used a Likert scale ranging from 1 to 5, where 5 indicated “strongly agree” and 1 indicated “strongly disagree”.

### **Data analysis**

The survey measures financial well-being through 8 items and financial capability through 9 items, using a Likert scale where 1 corresponds to “strongly disagree” and 5 corresponds to “strongly agree.” To construct the dependent and independent variables, the items corresponding to each construct were summed. The scales achieved good internal consistency, with financial capability (Cronbach’s  $\alpha = 0.805$ ) and financial well-being (Cronbach’s  $\alpha = 0.805$ ). Table 1 shows the means and standard deviations for each item.

**Table 1.** Central measures of the variables

Financial capacities			Financial well-being		
Items	Media	Sd	Items	Media	Sd
FC1	3.61	1.285	FWB31	3.90	1.127
FC2	2.57	1.366	FWB32	4.24	0.989
FC3	3.52	1.454	FWB33	3.52	0.999
FC4	2.48	1.372	FWB34	2.70	1.099
FC5	3.31	1.229	FWB35	3.31	1.106
FC6	2.65	1.383	FWB36	3.61	1.196
FC7	2.44	1.354	FWB37	3.04	1.187
FC8	3.03	1.461	FWB38	3.56	1.180
FC9	3.35	1.214			

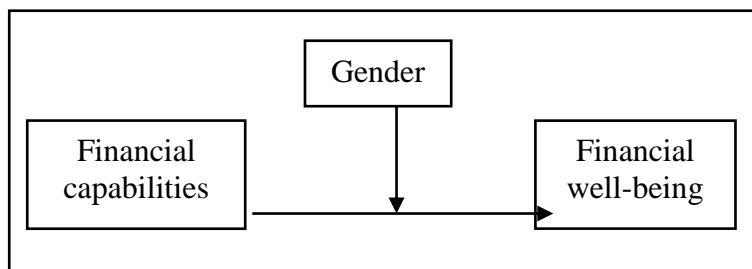
In Table 2, the frequencies obtained from the participants' profile variables are described. As can be seen, the participation of women and men was very balanced, with 48.7 % (n = 168) of the male gender and 49.3 % (n = 170) of the female gender. The age range varies from 18 years to over 40, with 29.6 % (n = 102) being older than 40, followed by 22.9 % (n = 79). Regarding marital status, 53.6 % (n = 185) are single, followed by 28.1 % (n = 97) who reported being married.

**Table 2.** Descriptive statistics of the socio-demographic profile

Variables	Frequencies	%
<b>Gender</b>		
Male	168	48.7
Female	170	49.3
Other	7	2.0
<b>Age</b>		
18 to 20	47	13.6
21 to 25	79	22.9
26 to 30	41	11.9
30 to 40	76	22.0
> 40	102	29.6
<b>MaritalStatus</b>		
Single	185	53.6
Married	97	28.1
Free Union	37	10.7
Separated	8	2.3
Divorced	18	5.2

### Moderation Results

To address the proposed hypothesis, H1: the gender of the participants will mediate the relationship between their financial capability and financial well-being, such that women with higher financial capability will have greater financial well-being compared to men. According to the proposed conceptual model (Figure 1), PROCESS was used to analyse the data.



**Fig. 2.** Study model

Moderation occurs when a moderator variable ( $Z$ ) influences the relationship between the independent variable ( $X$ ) and the dependent variable ( $Y$ ). This relationship can be expressed through appropriate equations to estimate the mediated effects and conduct statistical tests, as in the case of the single mediator model for  $X$ ,  $M$ , and  $Y$ .

$$Y = i_1 + c X + e_1 \quad (1)$$

$$Y = i_2 + c' X + b M + e_2 \quad (2)$$

$$M = i_3 + a X + e_3 \quad (3)$$

Where  $X$  is the independent variable,  $Y$  is the dependent variable, and  $M$  is the mediator variable; the parameters  $i_1$ ,  $i_2$ , and  $i_3$  are intercepts in each equation; and  $e_1$ ,  $e_2$ , and  $e_3$  are residuals. In Equation 1, the coefficient  $c$  represents the total effect, that is, the total effect that  $X$  has on  $Y$ , the dependent variable. In equation 2, the parameter  $c'$  denotes the relationship between  $X$  and  $Y$ .

while controlling for  $M$ , which represents the direct effect: the effect of  $X$  on  $Y$  adjusted for  $M$ , and the parameter  $b$  denotes the relationship between  $M$  and  $Y$  adjusted for  $X$ . Finally, in equation 3, the coefficient  $a$  denotes the relationship between  $X$  and  $M$  (Igartua, Hayes, 2021).

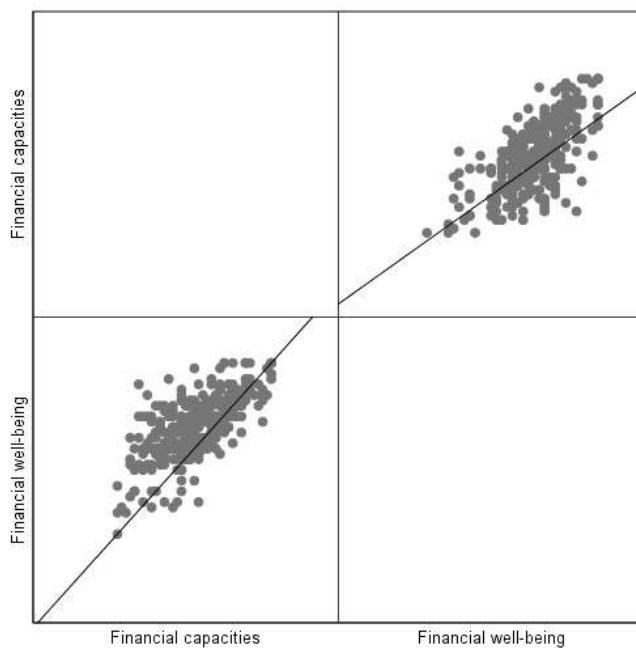
### Assumptions

To perform a moderation analysis, specific requirements must be met, which align with the prerequisites of a linear regression analysis. D. Osborne and Waters (2002) highlight the importance of four indicators that this analysis must fulfil: 1) normality, 2) linear association between variables, 3) reliability of the measure, and 4) homogeneity of variances (Table 3). The variables meet the assumptions: the significance of normality is greater than 0.01, and Levene's statistic ( $p > 0.05$ ) indicates homogeneity between variables. The reliability value of both variables is greater than 0.500, indicating that the items forming the constructs of financial capacity and well-being are reliable and consistent. Additionally, Figure 3 shows the linearity between the variables.

**Table 3.** Normality, Homogeneity and Cronbach's Alpha

Variables	Kolmogorov-Smirnov	Sig.	Cronbach' alpha	Levene statistic	df <sub>1</sub>	df <sub>2</sub>	Sig.
Financial capacities	.055	.021	.805	1.359	1	336	.244
Financial well-being	.053	.017	.781				

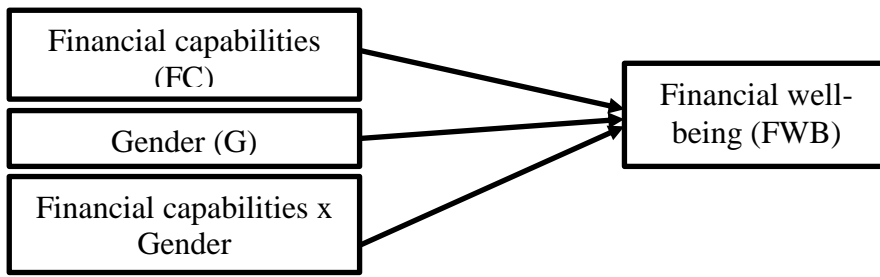
Source: own



**Fig. 3.** Linearity between variables

## 5. Results

In response to the hypothesis posed, which states:  $H_1$ : The gender of the participants, men and women, will mediate the relationship between their financial capacity and financial well-being, in such a way that women with higher financial capacity will have greater financial well-being compared to men. To this end, the original proposed conceptual model (Figure 1) has been redesigned into an adjusted model, as shown in Figure 3.

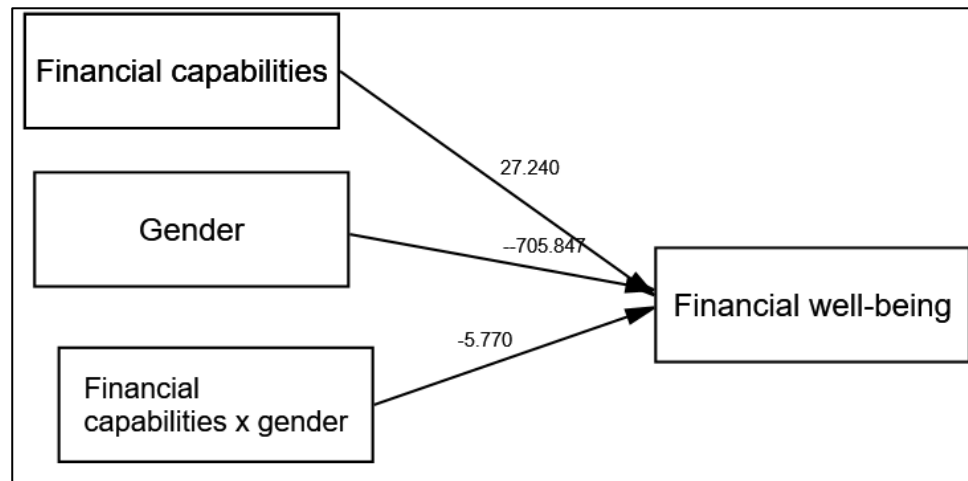


**Fig. 4.** Conceptual model proposed.

Table 4 and Figure 5 demonstrate a good fit for the statistical model ( $F = 99.453$ ,  $p < 0.001$ ), as the significance value is below 0.05. The model's variables explain 47.2 % of the model. The financial well-being variable contributes positively and significantly ( $\beta = 27.240$ ,  $p < 0.001$ ) to the financial well-being model. The gender variable also contributes significantly to the model, as its significance is less than 0.05. In contrast, the interaction between financial capacity and the participants' gender is not significant. These findings mean that the participants' gender does not mediate the relationship between their financial capacity and financial well-being.

**Table 4.** Summary of the Financial Well-Being and Financial Capacity Model

R	R <sup>2</sup>	MSE	F	df1	df2	p
0.687	0.472	48096.588	99.452	3	334	.000
Model						
	Coefficient	se	t	p	LLCI	ULCI
Constant	-705.847	44.310	-15.930	0.000	-793.008	-618.685
Financial capacities	27.240	1.581	17.232	0.000	24.131	30.350
Gender	-705.847	88.619	-2.237	0.026	372.546	-23.901
Int_1	-5.770	3.162	1.825	0.069	-.449	11.989



**Fig. 5.** Moderator statistical model

Similarly, Table 5 shows the conditional effects of the main predictor based on the values of the moderator. It is observed that there is a significant difference ( $p = 0.00$ ) in the relationship between capabilities and financial well-being regardless of whether the participant is male or female. Although the effect value appears to be increased."



**Table 5.** Total conditional effects

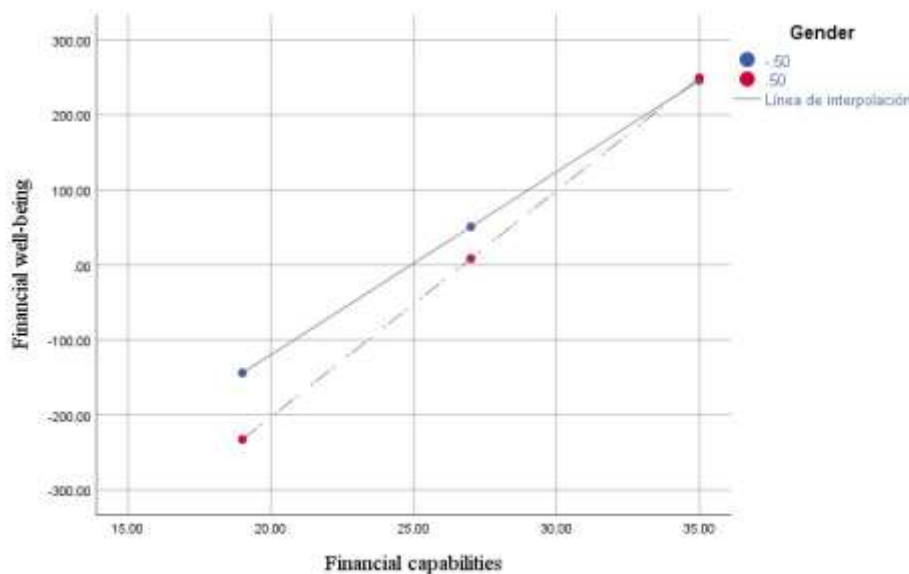
Conditional effects of the focal predictor at values of the moderator						
Gender	Effects	SE	t	p	LLCI	ULCI
-.500	24.356	2.158	11.284	0.000	20.110	28.601
.500	30.125	2.310	13.041	0.000	25.581	34.670

Table 6 displays the data to visualise financial capacity, gender, and financial well-being. The generated chart indicates that there is a difference in financial capacity and well-being between men and women. Women experience greater financial well-being as their financial capacity increases, but this can become equal when the financial capacity of both men and women is the same.

**Table 6.** Data to visualise the conditional effect of the focal predictor

Financial capacities	Gender	Financial well-being
19.00	-.500	-143.980
27.00	-.500	50.864
35.00	-.500	245.708
19.00	.500	232.576
27.00	.500	8.427
35.00	.500	249.430

Figure 6 illustrates that gender is not a significant variable in determining financial well-being. However, it is essential to note that financial well-being increases when the gender of the participants acts as a mediator for financial capacity.

**Fig. 6.** Conditional effect of the focal predictor

## 6. Discussion

Within the theoretical framework of this study, it has been widely recognised that financial capabilities are key determinants of financial well-being. Lusardi and Mitchell (2014) emphasised the importance of adequate financial education for making informed decisions, which directly affects economic security and financial well-being. Also, Brüggén et al. (2017) define financial well-being as the perception of the desired standard of living and future financial freedom derived from proper management of personal resources. The results of this study support this perspective, showing a positive and statistically significant relationship between financial capabilities and

financial well-being. Thus, it is confirmed that a greater ability to manage personal finances is closely linked to better economic well-being.

Regarding gender, various studies suggest that women, due to lower confidence in their financial knowledge and a tendency to make more conservative decisions, may face greater challenges in achieving satisfactory financial well-being. Consequently, Gignac et al. (2024) emphasised that women with high financial literacy and homeownership enjoy significantly higher financial well-being, as they are able to avoid over-indebtedness and manage their resources more efficiently. Hasan et al. (2024) argued, on the other hand, that both gender and social class play essential roles in the perception of financial well-being. However, the results of this study do not fully support this view. Although gender has a significant impact on financial well-being, it does not act as a significant moderator in the relationship between financial capabilities and financial well-being. The interaction between these two variables did not reach significance, suggesting that gender does not substantially mediate this relationship. Nevertheless, it is observed that women may experience greater financial well-being as their financial capabilities increase.

The literature also emphasises the significant role of financial knowledge and capabilities in enhancing economic well-being. Study after study, such as those by Agarwal et al. (2009) and Lusardi and Mitchell (2011a, 2011b), have demonstrated that people with greater financial knowledge tend to make more informed financial decisions, resulting in superior well-being. This study reaffirms the hypothesis that those with greater financial capabilities experience higher financial well-being. However, the absence of a significant moderating effect of gender underscores the importance of other factors, such as financial education and stress management, which may play a more relevant role in improving financial well-being, especially in a global context that remains unequal in terms of access to financial resources.

## 7. Conclusion

In conclusion, this study confirms that financial capabilities play a crucial role in improving financial well-being, regardless of gender. However, the results challenge the expectation that gender acts as a significant mediator in this relationship, suggesting that other underlying factors may be more determinative in the management of personal finances and economic well-being. The lack of a robust mediating effect by gender opens a broader research field, where financial education and equitable access to resources could be the true agents of change. This work not only reinforces the need to strengthen individuals' financial capabilities but also underscores the importance of inclusive policies that promote equal opportunities for access to and management of financial resources. Thus, improving financial capabilities could be the key to more robust and sustainable economic well-being, not just at the individual level, but also at the societal level, reducing inequality gaps and fostering economic stability across all sectors.

## 8. Implications

### *Theoretical Implications*

This study makes a significant contribution to the theoretical body of work on financial capabilities and their impact on financial well-being. The results reinforce the notion that financial well-being is intrinsically linked to an individual's ability to manage their economic resources effectively. By observing that gender does not significantly mediate the relationship between financial capabilities and financial well-being, the findings suggest that other factors beyond gender differences may be influencing financial well-being. This study opens new lines of research to explore other moderating and mediating variables, such as access to financial education, financial culture, or the socio-economic environment.

### *Practical Implications*

On a practical level, the findings suggest that public policies and educational programs should focus on improving the financial capabilities of all individuals, regardless of gender. Although women exhibit higher financial well-being as their financial capabilities improve, the absence of a gender-moderating effect suggests that interventions should be inclusive, providing both genders with equal opportunities to enhance their financial skills. Moreover, it is crucial for financial education programs to adapt to the needs of different groups, taking into account factors such as access to resources and stress management. The results also suggest that financial advisors should be mindful of gender differences in confidence and decision-making,

offering a personalised approach that promotes financial inclusion and reduces economic well-being inequality.

### **Research Implications**

Regarding future lines of research, it is suggested that other moderating variables be explored that may influence the relationship between financial capabilities and financial well-being. Factors such as access to educational resources, financial culture, or the socio-economic environment could provide a broader understanding of how financial capabilities interact with the economic well-being of different groups. Furthermore, longitudinal studies could be useful to observe the evolution of financial capabilities over time and their impact on financial well-being, considering factors such as age, life cycle changes, and economic fluctuations. Finally, another relevant area for future research would be to examine the impact of financial technology (Fintech) on individuals' financial capabilities and economic well-being, given that the use of digital tools is becoming increasingly important in personal financial management, especially in diverse socio-economic contexts.

## **9. Declarations**

### **Ethics approval and consent to participate**

This study was approved by the Ethics Committee of the School of Business at UCC, Cristóbal Colón University (*Project ID P-03/2025*), and by the Ethics Code for Research from the Division of Graduate Studies and Research at the National Technological Institute of Mexico. This study is conducted in accordance with the recommendations of the Code of Ethics of the National Technological Institute of Mexico, as well as those of the UCC Business School. The Research Ethics Committee of the Division of Graduate Studies and Research approved the protocol. In accordance with the Declaration of Helsinki, all workers gave their consent for participation in the study.

### **Consent for publication**

Not applicable.

### **Availability of data and materials**

Data and materials associated with this study are available upon request.

### **Conflict of interest statement**

The author declares no conflict of interest.

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### **Authors' contributions**

All authors, M.E-C., E.T-P., and A.G-S., designed this study. All authors collected and analysed data, contributed to the writing of the paper and reviewed the manuscript. All authors read and approved the manuscript.

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## **References**

- [Abdul, Akhtar, 2024](#) – Abdul Ghafoor, K., Akhtar, M. (2024). Parents' financial socialization or socioeconomic characteristics: which has more influence on Gen-Z's financial wellbeing? *Humanities and Social Sciences Communications*. 11(1): 1-16. DOI: 10.1057/s41599-024-03007-3
- [Agarwal et al., 2009](#) – Agarwal, S., Driscoll, J.C., Gabaix, X., Laibson, D. (2009). The age of reason: Financial decisions over the lifecycle. *Working Paper 13191*. [Electronic resource]. URL: <http://www.nber.org/papers/w13191>
- [Algarni et al., 2024](#) – Algarni, M.A., Ali, M., Ali, I. (2024). The role of financial parenting, childhood financial socialization and childhood financial experiences in developing financial well-

being among adolescents in their later life. *Journal of Economic and Administrative Sciences*. DOI: 10.1108/JEAS-07-2023-0194

**Bashir et al., 2024** – Bashir, I., Qureshi, I.H., Ilyas, Z. (2024). How does employee financial well-being influence employee productivity: A moderated mediating examination. *International Journal of Social Economics*. 51(10): 1226-1246. DOI: 10.1108/IJSE-09-2023-0676

**BBVA, 2020** – BBVA. Salud financiera: ocho indicadores para medirla [Financial health: eight indicators to measure]. 2020. [Electronic resource]. URL: <https://www.bbva.com/es/salud-financiera/salud-financiera-ocho-indicadores-medirla/>

**Birkenmaier et al., 2023** – Birkenmaier, J., Jung, E., McMillin, S., Qian, Z. (2023). Are credit scores and financial well-being associated with physical health? *Social Work in Health Care*. 62(5): 162-178. DOI: 10.1080/00981389.2023.2207614

**Brüggen et al., 2017** – Brüggen, E.C., Hogreve, J., Holmlund, M., Kabadayi, S., Löfgren, M. (2017). Financial well-being: A conceptualization and research agenda. *Journal of Business Research*. 79: 228-237. DOI: 10.1016/j.jbusres.2017.03.013

**del Carmen Briano-Turrent et al., 2024** – del Carmen Briano-Turrent, G., Zerón-Félix, M., Moreno-García, E. (2024). Impact of financial inclusion on human development indicators for women in Mexico. *Journal of Advocacy, Research and Education*. 11(2): 202-221.

**Dhiraj et al., 2023** – Dhiraj, A., Kumar, S. Rani, D. (2023). Financial Well-being Among Tourism Industries Employees in India. In Grima, S., Thalassinou, E., Noja, G.G., Stamataopoulos, T.V., Vasiljeva, T. and Volkova, T. (Ed.) *Digital Transformation, Strategic Resilience, Cyber Security and Risk Management (Contemporary Studies in Economic and Financial Analysis, Vol. 111B)*, Emerald Publishing Limited, Leeds, pp. 169-178. DOI: 10.1108/S1569-37592023000111B012

**Gafoor, Amilan, 2024** – Gafoor, A., Amilan, S. (2024). Fintech adoption and financial well-being of persons with disabilities: the mediating role of financial access, financial knowledge and financial behaviour. *International Journal of Social Economics*. 51(11): 1388-1401

**García-Santillán, 2024** – García-Santillán, A. (2024). Financial behavior and knowledge regarding debt payment and its relationship with sociodemographic variables. *Journal of Advocacy, Research and Education*. 11(1): 38-46. DOI: 10.13187/jare.2024.1.38

**García-Santillán et al., 2024** – García-Santillán, A., Escalera-Chávez, M.E., Santana, J.C. (2024). Exploring resilience: A Bayesian study of psychological and financial factors across gender. *Cogent Economics & Finance*. 12(1). DOI: 10.1080/23322039.2024.2431544

**Gignac et al., 2024** – Gignac, G.E., Gepp, A., O'Neill, T.J., Xue, R. (2024). The impact of housing tenure on financial wellbeing among elderly Australians. *Social Indicators Research*. 171(2): 655-675. DOI: 10.1007/s11205-023-03272-w

**Hasan et al., 2024** – Hasan, M.R., Jayasinghe, M., Selvanathan, E.A. (2024). New approach to measure wellbeing: A case study on Bangladesh. *Social Indicators Research*. 172(1): 283-311. DOI: 10.1007/s11205-023-03305-4

**Igartua, Hayes, 2021** – Igartua, J.-J., Hayes, A.F. (2021). Mediation, moderation, and conditional process analysis: Concepts, computations, and some common confusions. *The Spanish Journal of Psychology*. 24: e49. Doi:10.1017/SJP.2021.46

**Joo, Grable, 2004** – Joo, Sh., Grable, J.E. (2004). An exploratory framework of the determinants of financial satisfaction. *Journal of Family and Economic Issues*. 25: 25-50. DOI: 10.1023/B:JEEI.0000016722.37994.9f

**Karthika et al., 2023** – Karthika, M., Abraham, J., Kodali, P.B., Mathews, E. (2023). Financial wellbeing among older persons. In *Handbook of Aging, Health and Public Policy*. Springer, Singapore. DOI: 10.1007/978-981-16-1914-4\_199-1

**Kelley et al., 2023** – Kelley, H.H., Lee, Y., LeBaron-Black, A., Dollahite, D.C., James, S., Marks, L.D., Hall, T. (2023). Change in financial stress and relational wellbeing during COVID-19: Exacerbating and alleviating influences. *Journal of Family and Economic Issues*. 44(1). 34-52. DOI: 10.1007/s10834-022-09822-7

**Khan et al., 2022** – Khan, K.A., Çera, G., Pinto Alves, S.R. (2022). Financial Capability as a Function of Financial Literacy, Financial Advice, and Financial Satisfaction. *E & M Ekonomie a Management*. 25(1): 143-160. DOI: 10.15240/tul/001/2022-1-009

**Kim, Lee, 2024** – Kim, K.T., Lee, J. (2025). Financial well-being, anxiety and payment delinquency among student loan holders in the United States: Insights from the COVID-19 pandemic. *International Journal of Bank Marketing*. 43(2): 424-445. DOI: 10.1108/IJBM-05-2024-0277

- [Lusardi, Mitchell, 2011](#) – Lusardi, A., Mitchell, O.S. (2011). Financial literacy and retirement planning in the United States. *Journal of Pension Economics & Finance*. 10(4): 509-525. DOI: 10.1017/S147474721100045X
- [Lusardi, Mitchell, 2011](#) – Lusardi, A., Mitchell, O.S. (2011). Financial literacy around the world: An overview. *Journal of Pension Economics & Finance*. 10(4): 497-508.
- [Lusardi, Mitchell, 2014](#) – Lusardi, A., y Mitchell, O. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*. 52(1): 5-44.
- [Morrisey et al., 2023](#) – Morrissey, K., Taylor, T., Tu, G. (2023). Estimating the impact of relative financial circumstances in childhood on adult mental wellbeing: A mediation analysis. *Applied Research Quality Life*. 18: 915-930. DOI: 10.1007/s11482-022-10121-4
- [Mundi et al., 2024](#) – Mundi, H.S., Vashisht, S., Rao, M. (2025). A qualitative investigation into financial well-being and social capital of retired government school teachers. *Qualitative Research in Financial Markets*. 17(3): 576-603. DOI: 10.1108/QRFM-10-2023-0250
- [Elrayah, Tufail, 2024](#) – Elrayah, M., Tufail, B. (2024). Financial education, financial advice, financial attitude and financial literacy impact on university student's financial behaviour through financial capabilities. *Arts Educa*. 40: 193-207.
- [Nasr et al., 2024](#) – Nasr, R., Rahman, A. A., Haddad, C., Nasr, N., Karam, J., Hayek, J., ... , Alami, N. (2024). The impact of financial stress on student wellbeing in Lebanese higher education. *BMC Public Health*. 24(1): 1809. DOI: 10.1186/s12889-024-19312-0
- [Nykiforuk et al., 2023](#) – Nykiforuk, C.I., Belon, A. P., de Leeuw, E., Harris, P., Allen-Scott, L., Atkey, K., ... , Yashadhana, A. (2023). An action-oriented public health framework to reduce financial strain and promote financial wellbeing in high-income countries. *International Journal for Equity in Health*. 22(1): 66. DOI: 10.1186/s12939-023-01877-8
- [Osborne, Waters, 2002](#) – Osborne, J.W., Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research, and Evaluation*. 8(1).
- [Rahman et al., 2021](#) – Rahman, M., Isa, C.R., Masud, M.M., Sarker, M., Chowdhury, N.T. (2021). The role of financial behaviour, financial literacy, and financial stress in explaining the financial well-being of B40 group in Malaysia. *Future Business Journal*. 7: 1-18. DOI: 10.1186/s43093-021-00099-0
- [She et al., 2023](#) – She, L., Ray, A., Ma, L. (2023). Future time perspective and consumer well-being of millennials: implications for consumer resilience. *International Journal of Bank Marketing*. 41(5): 1154-1176. DOI: 10.1108/IJBM-08-2022-0341
- [Sollis et al., 2024](#) – Sollis, K., Biddle, N., Maulana, H., Yap, M., Campbell, P. (2024). Measuring wellbeing across culture and context—are we getting it right? Evaluating the variation in wellbeing conceptualisations throughout the world. *Social Indicators Research*. 174(1): 123-155. DOI: 10.1007/s11205-024-03382-z
- [Wan Ismail et al., 2024](#) – Wan Ismail, W.A., Madah Marzuki, M., Lode, N.A. (2024). Financial reporting quality, industrial revolution 4.0 and social well-being among Malaysian public companies. *Asian Journal of Accounting Research*. 9(4): 294-308. DOI: 10.1108/AJAR-12-2021-0263
- [Xiao et al., 2024](#) – Xiao, J.J., Kim, K.T. Lee, S. (2024). Consumer financial capability and financial wellbeing; multi-year analyses. *Applied Research in Quality of Life*. 19(2): 547-580. DOI: 10.1007/s11482-023-10253-1
- [Zhang et al., 2024](#) – Zhang, Y., Fan, L. (2024). The nexus of financial education, literacy and mobile fintech: unraveling pathways to financial well-being. *International Journal of Bank Marketing*. 42(7): 1789-1812. DOI: 10.1108/IJBM-09-2023-0531.