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An Investigation of the Impact of Financial Literacy on Households' Financial Well-Being: An Emerging Market Study

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ABSTRACT

In view of the amplified inflation rates and economic stagnation in a number of countries in recent times, financial vulnerability became a key concern in both developed and developing economies. The current study advocates financial literacy is a key to lessen financial vulnerability and promote financial well-being. We propose and test a thorough model investigating the key mechanisms contributing to financial literacy, and how it contributes to individuals' financial well-being in the context of an emerging market (i.e., Morocco). The mediating effects of indebtedness and financial behavior are also scrutinized. Based on survey data collected from a sample of 848 respondents from Morocco, the conceptual model was assessed using structural equation modeling (SEM). Our findings suggest financial literacy as a key to lessen financial vulnerability and promote financial well-being. Policy makers in Morocco and developing countries, where financial vulnerability is more prevalent, may use the current study findings to promote effective education programs to improve citizens' financial literacy and well-being. Our findings also convey no impact of education on financial literacy, suggesting that education programs in Morocco are still not yet aware of the importance of financial literacy as a key shaping students' career and financial well-being. Education policy makers are therefore urged to incorporate financial education and literacy as a key component in all education programs. Financial education programs should also take into consideration demographic disparities and therefore design financial education programs based on the target group to better delineate financial literacy in education programs.

Keywords: Financial Literacy, Financial Well-being, Indebtedness, Financial Knowledge, Economic Stagnation
JEL Classifications: G51, G53, I23

1. INTRODUCTION

Due to the significant increase in the rates of inflation and the expected economic stagnation in the next few years, individuals in both developing and developed countries might be exposed to the threat of financial vulnerability. In that context, financial literacy has been proposed by many scholars as a key solution. Nowadays, households must take daily financial decisions that have become more and more complex, particularly when facing income uncertainty. In such circumstances, individuals can engage in suboptimal financial behavior when they lack financial literacy and capabilities (O'Connor et al., 2019). Financial literacy helps in making sound financial decisions and is therefore essential to facing financial vulnerability. Financial literacy can also help in improving individuals' financial status and well wellbeing (Philippas & Avdoulas, 2020; Amari and Jarboui, 2015; Xiao and Porto, 2017).

In recent years, a large number of studies investigated financial literacy and its impact on financial behavior. These studies mainly focused on financial literacy impact on the stock market (Lebdaoui et al., 2021), impact on personal saving (Dholakia et al., 2016), effect on individuals' indebtedness (Azma et al., 2019), effect on individuals' willingness to invest (Chetioui et al., 2017), among others. Still, prior results with regards to financial literacy conveyed divergent results. The divergency in previous research findings can partially be due to differences in methodological approaches or in cultural and/or economic conditions (Santini et al., 2019). The current study proposes an integrated framework to analyze the key demographic and behavioral factors influencing financial literacy as well as its impact on financial well-being in an emerging market context. The mediating effects of financial behavior and indebtedness were also taken into account.

In Morocco, recent statistics from Bank-Al-Maghrib (BAM), Morocco's central bank, report that the overall debt of Moroccans represents nearly 30% of the GDP. BAM statistics also report that the average debt ratio for public sector employees is 58.5% while it represents 51.2% for private sector employees (BAM, 2021). While reviewing literature, we noticed a lack of relevant studies and data related to financial issues among individuals. In a financially non-industrial nation like Morocco, the absence of such data is a key concern. In that same context, the substantial increases in the prices of basic necessities became a key concern for most citizens, namely in an economy that is still recovering from the COVID-19 pandemic and associated economic shutdown. In such difficult times, financial literacy can assist households in making sound financial decisions. It is therefore of considerable importance to investigate the key determinants of individuals' financial literacy and how it contributes to financial well-being, namely in developing nations where financial vulnerability is more prevalent. Our findings will constitute a valuable groundwork for scholars, financial institutes, and Moroccan policy makers to suggest financial educational programs that can enhance financial literacy levels among citizens.

While reviewing extent literature, we identified few research gaps. First, most studies on financial literacy focused on explicit factors to determine the factors influencing financial literacy. This been said, most studies did not consider intercorrelated elements that can affect together individuals' financial literacy. In the context of the current research, we propose and test an integrated framework that incorporates the key demographic and behavioral determining factors of financial literacy among Moroccans. In addition, the current research attempted to elucidate how financial literacy contributes individuals' financial well-being through the mediating effects of indebtedness and financial behavior. Our review of literature also suggest that most studies have examined financial literacy in the context of high-income consumers. Still, studies investigating financial knowledge and literacy in the context of low-income countries are still limited. Investigating financial literacy and its impact on financial status and well-being in low-income countries is of considerable importance. To fill this gap, our study opt for investigating financial literacy in the context of a low-income country (i.e. Morocco). Finally, while indebtedness rates and financial vulnerability have significantly increased, we noticed a lack of public policy actions to promote financial literacy in Morocco. Our findings propose a holistic approach for financial literacy promotion in emerging market settings. The above discussions signify the relevance of the current research.

As financial decisions and choices influence individuals' financial wellbeing, investigating the antecedents of financial decision making has a potential to promote related public policies, promotional campaigns, and financial education programs (Lebdaoui et al., 2022). In an attempt to bridge the gaps pertaining to the antecedents of financial literacy, the present research investigates the demographic and behavioral factors that influence individuals' financial literacy through a thorough conceptual model. We also elucidate how financial literacy contributes to financial well-being. Our findings could be a valuable groundwork for scholars, financial institutes, and policy makers. The remainder of this research is organized as follows: the literature is presented in section 2, followed by the methods used in section 3. The results are illustrated in sections 4. The discussion and conclusions are elaborated in section 5.

2. LITERATURE REVIEW

2.1. Conceptual Framework

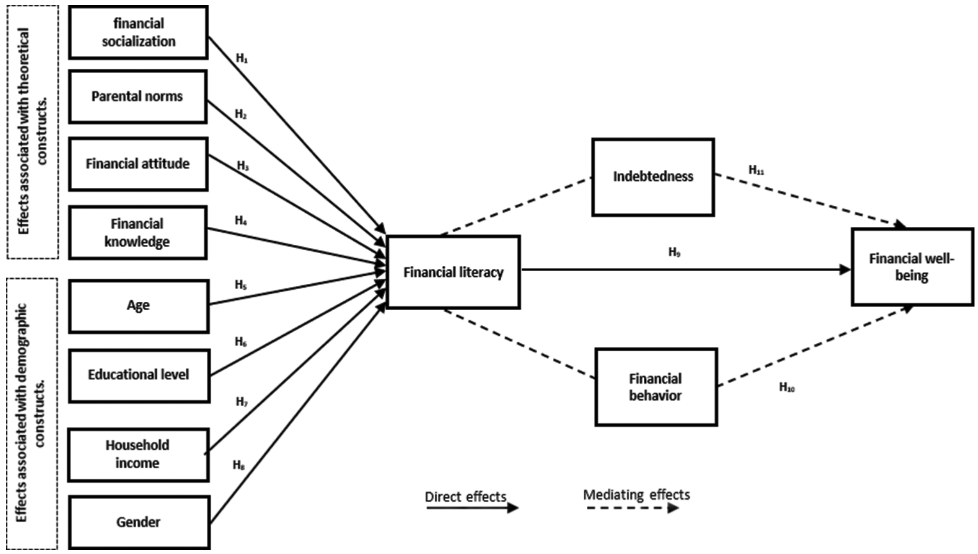
Despite the large interest of a number of studies in exploring its antecedents and consequences, financial literacy remains complicated to conceptualize and assess in practice (Lebdaoui et al., 2021). This is mainly due to the difficulty of identifying the key factors that make an individual financially literate (Fernandes et al., 2014). Accordingly, the current research investigates the key antecedents of financial literacy and how it contributes to financial well-being in an emerging market marked by the absence of studies and data related to individuals' financial issues (i.e., Morocco). The proposed conceptual model, as illustrated in Figure 1, is largely based on constructs borrowed from prior literature. It explores theoretical as well as socio-economic/demographic constructs to investigate the antecedents of financial literacy. Our model subsequently examines how financial literacy contributes to financial well-being. We finally assess the mediating effects of indebtedness and financial behavior in the relationship between financial literacy and financial well-being.

2.2. Hypotheses

Financial socialization reflects interactions that could occur between family members, friends, employees, or any form of social networking dealings. It refers to the learning process with regards to financial values, knowledge, norms, standards, and attitudes (Khawar and Sarwar, 2021). These social interactions occur when a person sees and notices social behaviors with regards to money running practices, which leads him/her to seek advice or supervision from friends and surroundings (Khawar and Sarwar, 2021). Prior literature suggests that financial socialization from family networks can build and shape financial behaviors related to money management (Ahmad et al., 2016). When individuals grasp correct financial information from their network, their financial decision tend to be more well-structured and reliable (Grohmann and Lukas, 2015). A good financial socialization process significantly impact individuals' financial decisions (Asad, 2017). Financial literacy was found to be significantly influenced by financial socialization through communication with social network (Hanson and Olson, 2018). Based on the discussed above, this study hypothesizes the following:

H_1: Financial socialization is positively associated with financial literacy.

Figure 1: Conceptual model



In addition to financial socialization, parental norms were found to have a great impact on their children' financial literacy (Jorgensen and Savla, 2010). Sundarasen et al. (2016) show that almost 77% of high school students derive financial information and knowledge from parents. In that same context, Ahmad et al. (2016) argued that individuals learn more about finance-related matters from the norms induced from their parents. It is known that individuals learn from patterns they identify and notice, especially those expressed by their parents (Sundarasen et al., 2016). Therefore, children tend to incline more towards the replication of the financial acts exhibited by their parents (Sundarasen et al., 2016). Based on the above, it is hypothesized that:

H_2: Parental norms are positively associated with financial literacy.

Financial attitude is also believed to enable its adapter to perform and take better choices with regards to any aspect that involves financial actions (Khawar and Sarwar, 2021). It consists of different features that enable a favorable behavior with regards to financial considerations (Hogarth and Hilgert, 2002). For instance, positive attitudes towards saving money lead individuals to adapt better financial behavior and decisions (Khawar and Sarwar, 2021). Financial attitude also helps in a better management of problems and issues related to financial aspects (Lebdaoui and Chetioui, 2021). It is therefore considered as an important antecedent of financial literacy (Santini et al., 2019). Therefore:

H_3: Financial attitude is positively associated with financial literacy.

Another key determinant of financial literacy is financial knowledge. Financial knowledge refers to the general information and education that individuals have with regards to financial subjects or themes (Xiao and Porto, 2017). It is attained through the erudition of concepts and capabilities that enable better financial control with regards to income, saving abilities, and purchasing behaviors amongst others (Delavande et al., 2011). Additionally, it enables its holders to perform better financial decisions, leading to more resourceful outcomes (Xiao and Porto, 2017). Having a well-founded financial knowledge significantly impacts individuals' financial literacy and behavior (Lusardi and Mitchell, 2014; Santini et al., 2019; Hamid and Loke, 2021). Hence, it is hypothesized that:

H_4: Financial knowledge is positively associated with financial literacy.

As for demographic antecedents, age has been widely used as either a control or moderating variable leading to financial literacy. However, and in the context of this study, age is considered as a direct determinant of financial literacy. According to Henager and Cude (2016), distinct age group express different personality traits and characteristics that affect their financial behavior and decisions. Age was also found to be an important determinant of financial knowledge (Henager and Cude, 2016). The older individuals get, the more the financial knowledge they express towards various financial matters (Henager and Cude, 2016), which increases their overall financial literacy. For instance, older people have "crystallized" literacy and knowledge that is mainly acquired from prior experience and persistent financial habits (Li et al., 2013; Xiao). Therefore:

H_5: Age is positively associated with financial literacy.

An individual's educational level is also considered among the main antecedents of financial literacy (Santini et al., 2019). It is described and identified as the different stages of education obtained from schools based on different requirements and learning outcomes (Silgoner et al., 2015). Regarding its relationship with financial literacy, it was mentioned in previous literature that individuals who expressed and proved higher educational levels, managed to express an increased level of financial literacy (Santini et al., 2019; Xue et al., 2016). This is explained by the fact that individuals with lower educational levels tend to avoid questions related to financial matters because of their lack of skills to understand the answers (Xue et al., 2016). We therefore presume that higher educational levels lead to a better and more positive financial literacy (Santini et al., 2019). It is hypothesized that:

H_6: Educational level is positively associated with financial literacy.

Household income is defined as the total revenue a household have (Silgoner et al., 2015). This income reflects the overall financial literacy that a households lead has. Households with higher levels of income are assumed to have high levels of financial literacy and vice versa (Santini et al., 2019). For instance, households with low-income levels have an increased desire to take loans to enhance their expenditure (Carr and Jayadev, 2015), why may lead to higher levels of financial vulnerability. This aligns with the findings of Santini et al. (2019). Based on the discussed above, it is hypothesized that:

H_7: Household income is positively associated with financial literacy.

The last determinant of financial literacy is gender. Males and females tend to have different levels of financial literacy (Santini et al., 2019). According to Sumit et al. (2009), males are more likely to have higher financial literacy levels compared to females. Santini et al., (2019) convey that the processes of performing financial calculations is easier for males compared to females (Santini et al., 2019). Males are also considered to be more financially literate due to their constant involvement and consideration in finance related topics (Sumit et al., 2009). It is therefore hypothesized that:

H_8: Gender has a direct influence on financial literacy.

Financial well-being is defined as an individual's ability to successfully meet his/her respective financial duties and responsibilities (Santini et al., 2019). It also refers to the satisfaction that an individual have while facing financial situations (Mende and van Doorn, 2015; Prawitz et al., 2006). Brüggen et al. (2017) shows that financial literacy has a significant impact on individuals' financial well-being. For an individual to reach his/her financial well-being, he/she must possess enough knowledge and skills to make sound financial decisions (Remund, 2010). Hence, the higher the financial literacy, the higher the financial well-being (Santini et al., 2019). Based on the discussed before, this study hypothesizes the following:

H_9: Financial literacy is positively associated with financial well-being.

The proposed conceptual framework also assess the mediating role of indebtedness and financial behavior in the relationship between financial literacy and financial well-being. Indebtedness refers to borrowing money and experiencing financial debts. Ahmad et al. (2016) suggest that individuals with higher levels of financial literacy and knowledge are less likely to engage in debt. Financial literacy has also found to be as a main antecedent of debt (Ajzen, 2011; Azma et al., 2019), as it enables individuals to attain better financial objectives while controlling their saving and loans (Lebdaoui and Chetioui, 2021). When individuals experience low degrees of financial literacy, their behaviors towards taking debts increase (Ahmad et al., 2016), which itself cause them to have low profits and revenues (Olson and Zoubi, 2017), leading to a lower level of financial well-being. In that same context, individuals with higher levels of financial literacy adapt better finance-related management activities leading to better savings and lower debt (Hamid and Loke, 2021). Based on the above, we posit indebtedness as a mediator in the linkage between financial literacy and well-being. Therefore, we propose the following hypothesis:

H_{10}: Indebtedness mediates the impact of financial literacy on financial well-being.

Financial behavior is defined as the actions that occur in response to individuals' motives and financial purposes (Henager and Cude, 2016). Santini et al. (2019) define financial behavior as a direct result of financial literacy. Individuals with lower levels of financial literacy may engage in subnormal financial behaviors (Fernandes et al., 2014; Calamato, 2011). It is important to highlight that financial literacy results in better knowledge and attitudes, leading to an overall positive and efficient financial decisions (Khawar and Sarwar, 2021). Financial literacy helps in understanding and interpreting financial situations (Gathergood, 2012), which assists individuals in engaging in appropriate financial behaviors. Sound financial behavior, in turn, increases individuals' income and financial satisfaction leading to an overall financial well-being (Santini et al., 2019). Hence:

H_{11}: Financial behavior mediates the impact of financial literacy on financial well-being.

3. METHODS

3.1. Measurement

All constructs and items were borrowed, with minor modifications, from prior studies. The questionnaire was presented in French, as it is the most frequently used among Moroccans (Chetioui et al., 2023a; Lebdaoui et al., 2022). We also used back-translation to translate all items from English to French (Brislin, 1986). In addition to the items assessing the posited constructs, demographic questions relating to age, gender, education, income and job were also incorporated. Respondents were asked to either assess each item using a five-point scale ranging from 1 (strongly disagree) to 5 (strongly agree) or select the correct answer from multiple choice questions.

3.2. Sample and Data Collection

The selection of Morocco for the current study is due to three main motives. First, we noticed a significant increase in the number of indebted households in Morocco recently. BAM, Morocco's central bank, reports that the average debt ratio is 58.5% for public sector employees and 51.2% for private sector employees (BAM, 2021). The BAM reports also convey that the overall debt of Moroccans represents about 30% of the GDP. The second motive of investigating financial literacy in Morocco is the lack of studies and data related to financial issues among individuals (Chetioui et al., 2023). Finally, with the significant increase in inflation rates, financial vulnerability became a key concern. Accordingly, we believe exploring financial literacy in the Moroccan context will provide valuable insights to individuals, scholar, and policy makers.

A self-administered online questionnaire was issued on WhatsApp, Messenger, emails and Facebook, as a voluntary selection method where individuals accepted to take part of the study (Chetioui et al., 2023b). Prior to data collection, the questionnaire was pretested with 20 respondents to make sure the content and structure of questions are appropriate. The data from the pilot study was not included in the main survey. Throughout a 4 months' period (February through May 2021), a total of 900 respondents successfully completed the questionnaire. About 848 valid responses were maintained (94.22%), while 52 responses were rejected for missing or anomalous answers. The valid responses were analyzed to assess reliability, validity and appropriateness for hypotheses testing.

Our analysis of the sample descriptive statistics suggests that most respondents are from Casablanca-Settat region (40%), followed by Rabat-Salé-Kénitra (21%), and then other regions. Our sample descriptive statistics convey a balanced distribution of gender with 439 (51.8%) males and 409 (48.2%) females. Almost 50% of respondents (422) belong to generation Z while the 426 respondents belong to other age generations. As for educational level, our statistics show that 71.6% of participants have at least a bachelor's degree while only 28.4% have no bachelor degree. For income distribution, 31.6% of respondents earned <3000 MAD, 11.0% earned between 3001 MAD and 5000 MAD, 23.6% earned between 5001 MAD and 7000 MAD, 18.0% earned between 7001 MAD and 10000 MAD, and 15.8% earned more than 10001 MAD. Finally, when asked about their debt, 66.6% of respondents conveyed that they already took a loan from either banks, friends, or family members. Prior to assessing the structural model, the measurement model was inspected in terms of construct reliability, convergent, and discriminant validity.

4. RESULTS

4.1. Assessment of Measurement Model

To investigate the antecedents of financial literacy and financial well-being, the SEM is used (Henseler et al., 2009). The partial least squares technique was used as it takes into consideration the early stage of theoretical advancement and the complexity of the conceptual model (Loudiyi et al., 2022). First, the model is assessed in terms of indicator reliability, construct reliability, convergent validity, and discriminant validity. Then we move to hypotheses testing through the assessment of the structural model.

As can be illustrated in Table 1, composite reliabilities and Cronbach's alphas of all constructs are above the 0.7 threshold (Henseler et al., 2009), confirming the constructs' reliabilities. But concerning the indicator reliability, it is only confirmed when all loadings are above the 0.7 threshold (Hair et al., 2014; Henseler et al., 2009), which is the case for the results displayed in Table 2. In addition to that, results also indicate that the average variance extracted for all constructs are above the value of 0.5, confirming convergent validity (Nassir et al., 2023). Finally, and to assess the discriminant validity, Hair et al. (2021) indicate that only the Hetrotrait–Monotrait ratio (HTMT) criterion must be valid. For this, all the values in the HTMT table must be below the threshold of 0.9 (Henseler et al., 2015), which is the case of our results as shown in Table 2. Hence, the evaluation of the indicator reliability, construct reliability, convergent reliability, and discriminant reliability indicate that all constructs can be used to test the theoretical model.

The results of the SEM direct effects are illustrated in Table 3. As expected, the financial socialization exhibits a significant positive impact on individuals' financial literacy ($\beta = 0.146$; $P < 0.01$), supporting H1. This is consistent with the idea that financial socialization shapes specific financial behaviors towards own money management (Ahmad et al., 2016) that leads to financial stability (Khawar and Sarwar, 2021). Results also indicates that parental norms positively impact financial literacy ($\beta = 0.169$; $P < 0.01$). This means that parents play an influential role in shaping the financial literacy of their children, supporting H_2.

Table 1: Convergent validity (n=848)

Constructs	Loadings	CR	CA	AVE	Constructs	Loadings	CR	CA	AVE
Financial attitude		0.927	0.904	0.719	Financial socialization		0.851	0.741	0.655
ATT1	0.874				FNOR1	0.789			
ATT2	0.892				FNOR2	0.829			
ATT3	0.828				FNOR3	0.810			
ATT4	0.810				Financial well being		0.860	0.796	0.608
ATT5	0.831				WEL1	0.738			
Financial behavior		0.879	0.828	0.594	WEL2	0.711			
BHV1	0.815				WEL3	0.856			
BHV2	0.718				WEL4	0.805			
BHV3	0.826				Indebtedness		0.728	0.75	0.504
BHV4	0.743				DEBT1	0.965			
BHV5	0.834				DEBT2	0.731			
Financial knowledge		0.901	0.865	0.646	DEBT3	0.893			
KND1	0.805				DEBT4	0.775			
KND2	0.829				Parental norms		0.752	0.804	0.565
KND3	0.804				PNOR1	0.768			
KND4	0.814				PNOR2	0.718			
KND5	0.766				PNOR3	0.945			
Financial literacy		0.796	0.795	0.535					
FL1	0.703								
FL2	0.789								
FL3	0.794								
FL4	0.757								
FL5	0.702								
FL6	0.989								

CR: Composite reliabilities, CA: Cronbach's alphas, AVE: Average variance extracted

Table 2: Heterotrait-Monotrait ratio (HTMT)

Constructs	Financial attitude	Financial behavior	Financial knowledge	Financial literacy	Financial socialization	Financial well being	Indebtedness	Parental norms
Financial attitude								
Financial behavior	0.756							
Financial knowledge	0.671	0.660						
Financial literacy	0.198	0.235	0.371					
Financial socialization	0.628	0.495	0.481	0.130				
Financial well being	0.521	0.659	0.641	0.253	0.372			
Indebtedness	0.054	0.126	0.065	0.121	0.164	0.127		
Parental norms	0.463	0.441	0.462	0.131	0.587	0.457	0.143	

Table 3: Direct effects

Hypotheses	Relationships			Findings	Results
H1	Financial socialization	→	Financial literacy	Positive and statistically significant (β=0.146; P<0.01)	Supported
H2	Parental norms	→	Financial literacy	Positive and statistically significant (β=0.169; P<0.01)	Supported
H3	Financial attitude	→	Financial literacy	Positive and statistically significant (β=0.225; P<0.01)	Supported
H4	Financial knowledge	→	Financial literacy	Positive and statistically significant (β=0.300; P<0.01)	Supported
H5	Age	→	Financial literacy	Non-significant effect (β=−0.043; P>0.05)	Not supported
H6	Educational level	→	Financial literacy	Non-significant effect (β=−0.051; P>0.05)	Not supported
H7	Household income	→	Financial literacy	Positive and statistically significant (β=0.071; P<0.01)	Supported
H8	Gender	→	Financial literacy	Negative and statistically significant (β=−0.066; P<0.01)	Supported
H9	Financial literacy	→	Financial well-being	Positive and statistically significant (β=0.09; P<0.01)	Supported

Table 4: Indirect effects

Hypotheses	Independent variables	→ Mediator	→ Dependent Variable	Std. Beta	T-Value	P-value	Decision
H10	Financial literacy	Indebtedness	Financial well being	0.003	0.004	0.606	Rejected
H11	Financial literacy	Financial behavior	Financial well being	0.100	5.042	0.000	Supported

Additionally, both the financial attitude (β = 0.225; P < 0.01) and financial knowledge (β = 0.300; P < 0.01) are found to have significant positive impacts on financial literacy, which supports H_3 and H_4, respectively. Individuals with solid financial attitudes (e.g., strong attitude to save money) and high levels of financial knowledge are more likely to make informed and effective decisions using their financial resources.

With regards to the effects associated with socio-economic and demographic variables, results indicate that both age (β = −0.043; P > 0.05) and educational level (β = −0.051; P > 0.05) does not have a significant impact on financial literacy. This means that being old or having high academic achievements has no impact on an individual's financial literacy, which rejects H_5 and H_6. Nonetheless, empirical findings indicate that having higher levels of household income lead to a better financial literacy (β = 0.071; P < 0.01), supporting H7. This is consistent with the idea that individuals who come from wealthy environments are more likely to make sound financial decisions. Also, results indicate that males have higher levels of financial literacy compared to females, which is consistent with the idea that males are more involved in finance related topics and group discussions compared to female (Sumit et al., 2009), supporting H_8. Finally, the results of this study indicate that financial literacy (β = 0.09; P < 0.01) have a positive and significant effect on financial well-being, supporting H_9.

To expand our knowledge of the relationship between financial literacy and financial well-being, we measured the mediating effect of indebtedness and financial behavior. Our findings suggest that indebtedness does not mediate the relationship between financial literacy and financial well-being (β = 0.003; P > 0.10), therefore rejecting H10. To note, indebtedness can have a twofold impact on financial well-being. This is mainly because a proper use of debt can enhance individuals' financial well-being and vice versa. But concerning the financial behavior, findings indicate that this variable mediate the relationship between financial literacy and financial well-being (β = 0.100; P < 0.01). This means that positive financial behavior increases the magnitude of the impact of financial literacy on financial well-being, approving H11 (Table 4).

5. DISCUSSION AND CONCLUSIONS

This study attempts to contribute to financial literature by exploring the key behavioral, demographic and socio-economic factors influencing individuals' financial literacy in an emerging context where studies related to monetary issues among individuals are still very limited. Another motive for investigating financial literacy antecedents and how it might contribute to better financial well-being in Morocco was the significant increase of indebtedness and financial vulnerability in recent years (Lebdaoui and Chetioui, 2021). The current study proposes and test an integrated conceptual model to investigate the key determining factors of financial literacy as well as its impact on financial well-being. We also extend prior findings by investigating the mediating effects of indebtedness and financial behavior in the relationship between financial literacy and financial well-being. Our findings convey a number of theoretical and practical implications.

5.1. Theoretical Implications

First, as predicted, financial socialization, parental norms, financial attitude and financial knowledge have all been validated as key predictors of individuals' financial literacy. Financial Socialization emphasizes to what level people incorporate their friends and relatives' financial attitudes, norms, and values into their daily life and behavior (Gudmunson et al., 2016). When an individual is surrounded by financial knowledgeable individuals, he is more likely to develop a good financial literacy and use it in daily decisions. The significant impact of financial socialization on financial literacy among Moroccans can also be explained by the collectivistic nature of the Moroccan culture. These findings are in line with the those of prior literature (Jorgensen & Savla, 2010; Xiao & Porto, 2017). Our findings also suggest that financial knowledge significantly impact respondents' financial literacy. This is also consistent with prior studies (Santini et al., 2019; Lusardi & Mitchell, 2014). A good understanding of financial information and risks helps in developing better financial literacy and making amended financial decisions. Financial attitude reflects the information, emotions and concepts that may lead an individual to behave unfavorably or favorably while making financial decisions. Individuals with good financial attitude generally have better financial literacy levels. This influences individuals' management of spendings, savings and investments (Kasman et al., 2018; Soroshian & Teck, 2013). Finally and in line with extent literature (Sabri et al., 2020; Serido & Deenanath, 2016), our findings confirm parental norms as a key determinant of individuals' financial literacy. Indeed, parents significantly influence their kids' financial literacy and behavior. Accordingly, individuals' levels of financial literacy are highly wedged by the financial knowledge they get from their parents.

As for demographic variables, while few findings were consistent with prior research, others were not. First, while prior research suggested a significant impact of age on financial literacy (Henager and Cude, 2016), our findings suggest no influences of the age difference on individuals' financial literacy. Older age may be associated with greater financial experience but do not necessarily with higher levels of financial literacy. In that same context, younger respondents may possess better knowledge about financial products and risks, but they do not necessarily have better financial literacy. This may differ from one country to another and does not necessarily apply in all contexts. Next, while prior studies found that the higher the education the better the financial literacy (Carr and Jayadev, 2015; Santini et al., 2019; Silgoner et al., 2015), our findings suggest no impact of educational level on financial literacy. This may alert universities and policy makers that the education programs are still lacking the financial literacy component which is key to a better management of individuals' finances, expenditures, and investments. Education policy makers in Morocco are urged to make reforms to incorporate financial education in all programs and therefore equip graduates with better financial knowledge and literacy. Another crucial determinant of financial literacy is Household income. Our findings were consistent with prior research outcomes and confirmed that households with higher levels of income have high levels of financial literacy (Santini et al., 2019; (Silgoner et al., 2015). Indeed, households with lower income generally attempt to look for different ways to finance their increasing expenditure and may therefore engage in bad financial decisions. Finally, gender was also found to significantly impact individuals' financial literacy as demonstrated in prior studies (Santini et al., 2019; Sumit et al., 2009). Our study confirmed that males are more likely to have higher financial literacy levels compared to females. This can be explained by the fact that males tend to act as household leaders in the Moroccan society, and therefore aquire better financial literacy and knowledge through the financial decisions and situations they face in daily life.

Our findings also validate financial literacy as a main determinant of financial well-being as conveyed in prior research (Braunstein & Welch, 2002b; Santini et al., 2019; Sundarasen et al., 2016). This suggests that financial well-being requires good knowledge and financial management skills (i.e., financial literacy). Financial literacy decides about individuals' relationship with money and therefore guarantees financial wellbeing by eradicating financial concerns and engaging in sound financial decisions. Financially literate people are also able to scrutinize their finances and budgets, and maintain savings without hampering life standards. Still, while extent literature (Flores and Vieira, 2014; Lebdaoui and Chetioui, 2021) revealed a negative impact of financial literacy individuals' indebtedness, our findings suggest no significant relationship. We also found that indebtedness has no effect on financial well-being. Indeed, while a number of studies associate indebtedness with unsound financial decisions and status, our findings demonstrate that with good financial literacy levels can also engage in debt. Debt might is generally considered bad when it is not possible to repay or when it does offer any long-term benefits. Still, the debt offers a good return on investment, even financially literate individuals can engage in it.

For the mediating effect of financial behavior, our findings suggest a significant mediating effect of financial behavior in the relationship between financial literacy and financial well-being. Individuals with greater financial literacy generally engage in financial behaviors that are based on strong concepts and better data management. The use of financial literacy while making financial decisions helps in increasing one's income, financial satisfaction and overall financial well-being (Santini et al., 2019). As for indebtedness, our findings suggest no mediating impact on the relationship between financial literacy and financial well-being. This insignificant impact can be explained by the insignificant impact of indebtedness on financial well-being in the context of our study. Accordingly, our study emphasizes that while financial literacy does not necessarily prevent individuals from taking loans, indebtedness does not significantly impact individuals' financial well-being.

5.2. Practical Implications

Our study suggests a number of managerial implications to policy makers, academicians and institutes involved in promoting financial well-being in Morocco and similar countries. First, our findings confirm that financial literacy enhances individuals' financial well-being. Nevertheless, conventional financial literacy programs may not be adequate. Policy makers and financial advisor need to disseminate behaviors that boost consistent savings and techniques to produce and preserve a saving-oriented lifestyle (Dholakia et al., 2016). To do so, financial education initiatives should focus more on interpersonal skills. Second, our findings suggest no impact of education on financial literacy. This suggests that education programs in Morocco are not yet aware of the importance of financial literacy in shaping students' future financial well-being. Education policy makers are therefore urged to incorporate financial education and literacy as a key component in all programs and fields. Our findings also suggest a significant impact of demographics on individuals' financial literacy (i.e., Household income and gender). Accordingly, for a better efficiency of financial education initiatives, policy makers ought to take into account the demographic differences among divergent target groups. Our findings also provide important insights to financial advisors and can help them in improving the effectiveness of their educational efforts by designing targeted education activities for clients with various needs. Finally, our findings could offer implications to society by emphasizing the importance of financial literacy in enhancing individuals' financial well-being. This can help in encouraging more citizens to take part of financial education programs in order to make better financial decisions and therefore achieve financial well-being.

5.3. Limitations and Future Research

This study has few limitations. First, the current study was based on a cross-sectional analysis. Future research could examine financial literacy and behavior using a longitudinal approach. Second, the study was conducted with individuals from only one country. In order to overcome cultural and economic disparities, implementing it in other countries and compare the findings would be of added value. Finally, the study used convenience snowball sampling for data collection. Using a nonprobability sampling technique for data collection can be criticized. Still, adopting a probability sampling method was not feasible in the context of our framework.

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