Philippine Journal of Interdisciplinary Research (PJIR)
Volume I, Issue 1 (January 2025)

Does Generational Cohort Matter? The Effects of Financial Literacy and Financial Inclusion on Financial Capability

Princess Camille Dela Peña[1] and Jean Paolo G. Lacap[2]

[1]Polytechnic University of the Philippines, Sta. Mesa, Manila, Philippines
[2]City College of Angeles and Polytechnic University of the Philippines – Sta. Mesa Campus

Corresponding email: pctdelapena@iskolarngbayan.pup.edu.ph
Received: 28 Mar 2023; Accepted 11 May 2023; Available online: 08 October 2024

Abstract. The paper examines the moderating effect of generational cohort on the influence of financial literacy and financial inclusion on financial capability. The respondents were identified using the purposive method of sampling and these respondents comprised of Generation X and Y, employed or self- employed, who reside in the province of Pampanga. The research design used was the predictive-correlational method and Partial Least Squares Structural Equation Modeling (PLS-SEM) was utilized to gauge the parameter estimates. The results revealed that the components of financial literacy (financial attitude, financial behavior, and financial knowledge) are essential factors to build up financial capability. However, it also found out that Generation X and Y's financial inclusion is still insufficient, especially for those who reside in the province where access to financial institutions as well as knowledge about financial products and services are limited. Moreover, it was found that the generational cohort has no moderating effect on the relationship between financial literacy and financial capability. However, the influence of financial inclusion on financial capability can be altered depending on the generational cohort (Gen X or Y).

Keywords: *financial Literacy, financial capability, financial inclusion, financial attitude, financial behavior, financial knowledge, Generational Cohort*

INTRODUCTION

The growing need for financial literacy in the 21st century was brought by various reasons, including globalization broadening the number of financial products available in all countries, including those with formerly less developed financial markets, and thus, fewer experienced consumers. The modern reality that almost everyone has access to the internet causes the constantly increasing complexity of available financial products and the introduction of new products into the market. Despite the global changes, only 1 in 3 adults (33%) worldwide are financially literate, according to the Global Financial Literacy Survey (Standard & Poor, 2014). Considering that the Financial Crisis in 2008 was viewed as a "teachable moment" for financial literacy, so could the "COVID-19 Recession" that is currently happening be seen as another historical moment that urges the need not just for financial literacy but for financial capability, both for the advantage of individuals facing unprecedented financial challenges and for any possible macroeconomic mediation that may cause a decrease in the number of individual crises (Faulkner, 2021).

Recently, many Filipinos have been forced to consider their finances due to the pandemic. However, the country's financial literacy remains a significant source of concern. Only half of Filipino adults correctly answered financial literacy questions in 2015 the World Bank (WB) survey and the Central Bank's 2019 financial inclusion survey. This finding was supported by the Governor of Bangko Sentral ng Pilipinas, Benjamin Diokno, revealing that only 3 out of 7 financial literacy questions were correctly answered by Filipino respondents, and the underperforming results mainly were from topics such as inflation, interest computation, and simple division (Hani, 2021). In addition, a survey from Home Credit showed that only 10% of Filipino respondents correctly answered the questions that tested their knowledge of various financial concepts (Business World, 2022).

Financially literate people bring beneficial macro and microeconomic advantages to society, nation, and globally. To achieve financial literacy, people should understand three (3) key components: Financial Attitude, Financial Behavior, and Financial Knowledge. Improving one's financial knowledge may change one's attitude toward finances, eventually changing one's financial behavior and, as a result, an expanded financial literacy. However, only some scholars insist that financial literacy is a valuable but inadequate idea. Hence, a broader concept was born – Financial Capability (Huang et al., 2022). Aside from financial literacy, individuals must also strengthen their financial inclusion, or access to financial products or services, to be financially capable.

Prior studies examined the concepts of financial literacy, financial inclusion, and financial capability. For instance, Cera et al. (2021) studied financial literacy and inclusion's influence on financial capability. Moreover, Aw et al. (2019) identified the moderating role of gender in the relationship of Financial Literacy, Behavior, and Vulnerability Among Malaysian Households. Iramani and Lutfi (2021). studied the integrated model of financial well-being, which examined the role of financial behavior in establishing an individual's financial capability. Potocki and Cierpiał-Wolan (2019) investigated the factors shaping the financial capability of low-income consumers from rural regions of Poland. The moderating effect of financial knowledge on financial management behavior was then studied by Grable et al. (2020).

Moreover, Białowolski et al. (2021) investigated the decomposition of the financial capability construct through a structural model of debt knowledge, skills, confidence, attitudes, and behavior. However, to the author's knowledge, there is a dearth of studies finding out if generational cohort, specifically Gen X and Gen Y, significantly alters the influence of financial literacy and inclusion on financial capability. The present study addresses this gap by exploring how Filipinos' financial literacy, financial inclusion, and financial capability vary depending on the generational cohort. Furthermore, the study aims to identify the significant differences in the financial capability of Gen X and Gen Y to recommend best practices to improve the financial capabilities of all generational cohorts, particularly in the Philippines, during the pandemic.

Review of Related Literature

Financial Literacy

Financial literacy is defined as an individual's capacity to effectively navigate economic facts and figures, enabling informed decision-making to establish a robust financial foundation (Mitchell & Lusardi, as cited by Farida et al., 2021). It encompasses the ability, motivation, and convictions required to apply this knowledge in making sound financial decisions, thereby enhancing the financial well-being of individuals and communities, and promoting participation in the economy (Farida et al., 2021). Financially literate individuals are better equipped to manage their finances, enabling them to save for emergencies, fund their children's education, and prepare for their post-retirement years (Henderson et al., 2021).

Financial literacy encompasses three distinct exogenous variables: financial attitude, financial behavior, and financial knowledge (Saini & Rani, 2022). It should not be confused with financial education, as financial literacy extends beyond acquiring knowledge; it includes the ability and confidence to apply this knowledge effectively (Huston, 2010, as cited by Beck & Garris III, 2019). In essence, while financial education imparts knowledge, financial literacy encompasses the practical application of that knowledge in decision-making.

Financial literacy and financial capability are related but distinct concepts. Financial literacy involves possessing the knowledge, understanding, and skills to manage one's finances, while financial capability goes further by encompassing observable financial behaviors that demonstrate this ability (Goyal & Kumar, 2020). The combination of financial literacy and financial inclusion results in financial capability, signifying both the ability and the opportunity to take action in managing one's finances (Sherraden, 2013; Goyal & Kumar, 2020; Cera et al., 2021).

For Filipinos, financial literacy has been recognized as essential, although challenges exist due to overspending beyond their means. The Philippine government has taken steps to address this by organizing financial education initiatives and making it mandatory for teachers to undergo financial literacy workshops, with the goal of equipping educators to impart financial knowledge to students and citizens (de Castro et al., 2020; Tilan, 2021).

In conclusion, financial literacy is a critical concept for improving economic welfare, as it empowers individuals and communities to make informed financial decisions, ultimately contributing to better financial capability and financial inclusion.

Financial Attitude

Financial attitude refers to an individual's mindset, judgment, and opinions about financial matters, often shaped by their background and environment (Pankow, as noted by Adiputra, 2021). It encompasses an individual's inclinations and beliefs regarding financial topics, including their ability to initiate and maintain a savings account (Dua et al., 2019). Furthermore, financial attitude reflects an individual's fundamental financial knowledge and their decision-making skills concerning financial matters (Shim et al., as cited by Talwar et al., 2020).

Financial attitudes are rooted in both economic and non-economic philosophies and can influence how a person evaluates financial management practices with varying degrees of acceptance or rejection (Parrotta & Johnson, in Humaira, 2018). These attitudes can be characterized by feelings of entitlement and conscientiousness, both of which are crucial for individuals to exhibit sound financial behavior (Beutler & Gudmunson, as cited by Ho and Lee, 2020).

Research suggests that financial attitude can significantly impact financial literacy. Individuals with positive financial attitudes tend to think critically about financial matters and make better financial plans, such as choosing suitable investments matching their risk tolerance and creating practical savings strategies (Ameliawati & Setiyani, 2020; Goyal & Kumar, 2020). Developing favorable financial attitudes can lead to improved financial literacy across different age groups, particularly through educational programs (Kamarudin et al., 2021).

In summary, financial attitude plays a crucial role in shaping individuals' financial behavior and overall financial literacy, with positive attitudes often leading to more responsible financial decision-making.

Financial Behavior

Financial behavior encompasses the specific actions taken by individuals or households in managing their finances, including budgeting, spending, borrowing, saving, investing, and managing financial risks (Xiao, as cited by Birkenmaier and Fu, 2020; Chen and Lemieux, 2016). It represents the practical implementation of financial knowledge and attitudes in daily financial management, covering various aspects of personal finance, such as cash management, retirement planning, and credit management (Jorgensen et al., 2019; Brenner et al., 2020). Financial management and behavior are closely interconnected, with the ability to handle money effectively being a critical component of achieving success in life (Arofah et al., 2018). Positive financial behavior leads to the achievement of financial goals and increased financial satisfaction, as it enables individuals to control their financial circumstances better (Yap et al., 2019). Such behavior involves controlling income and expenses, cultivating saving habits, setting financial objectives, and planning for future financial needs (Farida et al., 2020).

In the Philippines, there is recognition that improving financial behavior is essential, as many individuals do not use financial resources effectively, even when available (Once et al., 2019). Enhancing the quality of financial education, both in families and schools, is seen as a way to improve financial behavior (Arofah et al., 2018). Financial education can positively influence financial behavior and help individuals make better financial decisions (Wagner and Walstad, 2018). However, the effectiveness of financial education depends on individuals' willingness, preferences, and economic circumstances.

Financial Knowledge

Financial knowledge is a fundamental component of financial literacy, encompassing an individual's understanding of micro and macroeconomics, finance, and financial concepts needed for competent financial decision-making in daily life (Lusardi & Mitchell, 2014; Bowen, as cited by Rabbani, 2021). It empowers individuals to tackle financial challenges efficiently, ensuring financial stability and growth (Hilgert et al., as cited by Alshebami and Al Marri, 2022). Individuals with strong financial knowledge and decision-making abilities are better equipped to analyze options, make informed financial decisions, and plan for long-term financial objectives, such as retirement or investments.

Financial knowledge should not be conflated with financial literacy, as the former is centered on understanding financial terms and concepts, while the latter involves applying that knowledge effectively (Huston, 2010, as cited by Tanoto & Evelyn, 2019). Financial literacy is a more comprehensive concept, encompassing the ability to use financial knowledge appropriately in decision-making.

Research indicates that individuals with sound financial knowledge tend to have greater trust in financial institutions and demonstrate responsible financial management (Van Der Cruijsen et al., 2021; Atlas et al., 2019). Conversely, a lack of financial knowledge is associated with more financial issues, while higher financial knowledge is linked to more responsible financial practices (Yao & Meng, 2018).

In today's complex global economy, financial knowledge is crucial not only for financial professionals but also for individuals managing their finances. It enables wise financial decision-making as consumers, savers, and investors, strengthening the economy and fostering growth (Happ et al., 2022). Addressing the lack of financial knowledge is crucial, as financial tools and products become increasingly intricate, requiring broader financial literacy for consumers to make informed choices (Konthakota & Kiss, 2020).

In conclusion, financial knowledge is a foundational component of financial literacy, enabling individuals to make informed financial decisions and contributing to overall economic well-being.

Relationship of Financial Attitude, Financial Behavior, and Financial Capability

Financial Behavior and Financial Attitude are crucial elements of financial literacy (Cera et al., 2021; Ari et al., 2019; Shkvarchuk & Slav'yuk, 2019). Attitude conveys implicit beliefs that can influence behavioral intentions (Ajzen, 2020; Bosnjak et al., 2020). Beutler and Gudmunson (2012, as noted by Ho and Lee, 2021) elaborate that financial attitude involves feelings of entitlement and conscientiousness, and both attitudes are needed for an individual to demonstrate good behavior. Furthermore, attitudes significantly influence financial decision-making, as Financial Attitude plays an essential role in forming an individual's financial behavior (Totenhagen et al., 2019; Shih et al., 2022). It was found that financial attitude precedes financial behavior (Çera et al., 2021; Yong et al., 2018). Various studies stated that attitude is a crucial term for understanding behavior (Ajzen, 2020), and financial attitudes are significantly related to financial management behavior (Yap et al., 2018). Various studies also found that attitude predicts behavior (Sample and Warland, as cited by Dagosta, 2020; Iramani & Lutfi, 2020), making these variables related.

According to research, young people's financial literacy may be influenced by their attitude toward money. Students' behavior in achieving financial literacy and enhancing financial knowledge can be influenced by their positive attitude toward money and finances. However, having a bad attitude will make it harder for them to make wise financial decisions (Rai et al., 2019). Thus, academics have acknowledged that psychological elements are crucial in influencing people's financial behavior and have stressed the significance of thoroughly investigating these factors (Strömbäck et al., 2017). In this sense, a person's financial attitude indicates their fundamental financial understanding and capacity for managing decisions regarding their financial dealings (Shim et al., as cited by Cera et al., 2021).

Considering the above discussion, the hypothesis can be formulated:

H1a. Financial attitude significantly influences financial behavior.

Moreover, an improved attitude enhances financial capability (Batty et al., 2015, as noted by Cera et al., 2021). In finance, attitude can be defined as an opinion and a mindset about how a person handles his finances and makes financial decisions (Arifin, 2018). Attitude refers to one's ability to make sound financial judgments, and an individual who can make sound financial decisions can be termed financially capable (Cera et al., 2021). Białowolski et al. (2021) featured financial attitude as one of the components of financial capability in the debt domain. Moreover, the OECD (2016, as cited by Białowolski et al. 2021) added financial attitude as one of the formative factors of financial capability. The conceptual model of young adults' financial capability formulated by Serido et al. (as cited by Ranta and Salmela-Aro, 2018) emphasized that financial attitudes positively affect financial well- being through responsible financial practices, consequently improving the financial capability of an individual. In light of the discussion above, the following hypothesis can be developed:

H1b. Financial attitude significantly influences financial capability.

Relationship of Financial Knowledge, Financial Behavior, and Financial Capability

Various studies proved that financial knowledge is associated with financial behavior (Civelek et al., 2019; Kalmi, 2018; Moreland, 2018) either for the long term and short term, or both (Kim et al., 2019). A more comprehensive financial knowledge leads to more successful retirement planning and investments in financial products (Grable et al., 2020; Cera et al., 2021). It was found that individuals with a high level of education and business studies positively correlated with the likelihood of regular personal savings (Belas et al., 2018; Nguyen, 2020). Financial knowledge influences borrowing, saving, investment, and similar financial decisions and behavior (Lusardi & Mitchell, 2014). Furthermore, studies revealed a strong correlation between a person's financial knowledge and financial practices, which allows them to plan their payments, save for emergencies, invest wisely, and create financial objectives (So et al., 2021). The study of Grable et al. (2020) reveals that higher degrees of financial knowledge are linked to more risky financial management behavior being exhibited by an individual. For instance, Robb and Sharpe (as cited by Grable et al., 2020) discovered that students with more excellent financial knowledge have significantly higher credit card balances than students with lower levels of financial knowledge in a study including more than 6500 college students.

Research findings on the relationship between financial behavior and knowledge have been mixed. Although the effect size and direction of the association are still being debated, results from several studies tend to support the idea that more excellent financial knowledge tends to be associated with more positive and responsible financial behaviors, measured both objectively and subjectively (Alshebami & Al Marri, 2022; Iramani & Lutfi, 2021). To summarize, it is critical to recognize that the literature associated with the relationship between financial knowledge and financial behavior tends to be multifaceted and needs more consensus. What has become clear from the literature is that financial knowledge is a crucial factor but not the sole basis of financial behavior. Thus, another relationship to test is:

H2a. Financial knowledge significantly influences financial behavior.

An individual's knowledge of financial markets and systems is crucial to financial capability (Panos & Wilson, 2020; Mitchell & Lusardi, 2022). As mentioned earlier, financial knowledge is one of the critical elements of financial literacy. Financial knowledge must be studied individually to bring out the specific effects of financial knowledge on financial capability (Rothwell & Wu, 2019) because the focus on improvement has changed towards financial capability among consumers (Potocki & Cierpiał- Wolan, 2019). Persistence to learn financial concepts with improved attitudes and behaviors may result in enhanced financial capability (Batty et al., 2015, as cited by Cera et al., 2021). Individuals with a lower level of education are more likely to exhibit behaviors associated with a lack of financial capability. Therefore, gaining financial knowledge is the foundation for developing financial capability. The National Financial Capability Study considers four components of financial capability, including financial knowledge (Goyal & Kumar, 2020). Białowolski et al. (2021) also conducted a study that included financial knowledge of the components of financial capability in the debt domain. Financial knowledge positively affects future financial capability, yet, upon checking the literature, it currently does not have enough support (Cera et al., 2021), which is a new insight to investigate. Therefore, another hypothesis to test is:

H2b. Financial knowledge significantly influences financial capability.

Influence of Financial Behavior on Financial Capability

Financial behavior is a crucial factor that molds financial capability (Potocki & Cierpiał-Wolan, 2019; Çera et al., 2021). Financial capability holds individual and structural components that merge the individual's ability to act and the opportunity to act, i.e., financial inclusion (Çera et al., 2021; Huang et al., 2022). The application of financial knowledge strengthened by desirable financial behaviors to achieve financial well-being is referred to as financial capability (Potocki & Cierpiał-Wolan,2019; Çera et al., 2021). The concept of financial capability augments financial literacy by another dimension, which is a desirable financial behavior (Białowolski et al., 2021). "Consumer financial capability" is frequently used within disciplines and across them. As a term, it describes several connected topics, such as the extent to which customers demonstrate excellent financial management behaviors (Birkenmaier et al., 2022; Money & Pensions Service, 2020) and the potential or capacity that consumers possess for demonstrating effective financial management behaviors (Prosperity Now, 2020a; Sherraden, 2013). Interventions are designed to develop consumer financial capability by either building financial management skills or increasing their capacity for solid financial management behaviors (Birkenmaier et al., 2022). Anvari-Clark and Ansong (2022) examined the data from the Consumer Financial Protection Bureau's Financial Well-being Survey from the Consumer Financial Protection Bureau to identify and evaluate elements that were drawn from Sherraden's (2013) model of Financial Capability as well as associated with it. Compared to what the researchers refer to as "structural factors" or interactional factors like financial shocks, income volatility, and the use of financial products, they discovered that behavioral factors such as savings habits and amounts are more significantly associated with financial well-being and financial capability. It is hypothesized that outcomes will lead to more excellent financial capability by focusing more on education and intervention programs that more firmly emphasize behavioral changes (Birkenmaier, 2022).

To summarize, financial capability is measurable through financial behaviors, and it was found that favorable and less risky financial behaviors result in higher financial capability. Hence, a new hypothesis is proposed as:

H3. Financial behavior significantly influences financial capability.

Influence of Financial Inclusion on Financial Capability

Financial capability is the ability to act and act, whereas the opportunity to act is referred to as financial inclusion (Cera et al., 2021; Goyal & Kumar, 2021; McGarity, 2018). Financial inclusion, the goal of financial access, broadly refers to the ability of all members of a society to access and be empowered to use timely, accessible, cost-effective, financially attractive, easy-to- use, safe, secure, and reliable financial products and services to achieve their goals. Moreover, financial inclusion involves awareness, availability, and accessibility of financial products and services, ensuring that an individual can conveniently reach financial services and products. This access to various financial products and services promotes financial capability in every individual of a household and society (Birkemaier, 2019; Nizam et al., 2020).

On the other hand, poor financial inclusion refers to people's inability to access and use financial services, which prevents them from effectively saving their money, preparing for cost-effective borrowing, and protecting themselves and their families from basic disasters such as hunger, crime, and natural disaster (Elsayed, 2020). In this case, financial inclusion improvement is necessary, and it can cause the development of financial capability (ACCION, 2019).

Improved financial inclusion increases individuals' ability to invest and protect from risk.

Financial inclusion is profoundly and positively associated with an individual's savings, as access to bank accounts is related to it (Morgan & Long, 2020). Enhanced saving boosts individuals' financial stability.

Various studies emphasized external factors (i.e., access to and use of services and products) regarding financial capability improvement. It stated that financial inclusion is a crucial point to be watched over for financial capability development (Rashid et al., 2022; Cera et al., 2021; Sun et al., 2022). Financial inclusion is crucial for improving financial capability (Arnold and Venkatesan. 2021). In order to cope with these issues in money management, such as tragedies, uncertainties, poverty, and scarcity of resources (Nandru et al., 2021), financial inclusion of the individuals is one of the requirements because it is a means of developing an individual's financial capabilities and skills, which improves that person's financial capability. Rajalakshmi (2021) indicated that financial inclusion (particularly for women) is critical for their financial capability, which is essential to their economic development. The below-mentioned hypothesis has been proposed based on the evidence given by the existing body of knowledge:

H4. Financial inclusion significantly influences financial capability.

Moderating Role of Generational Cohort (Gen X and Y)

Generational cohorts are specified as groups of individuals who were born during the same period and traveled through life together. Hence, the same generational cohort experienced similar external events in their late adolescence and early adulthood (Karashchuk et al., 2020; Bottomley & Willie Burgess, 2018). Age can affect an individual's interests, attitudes, and buying behaviors (Tan & Ooi, 2018; Sheth, 2020; Eger et al., 2021). Therefore, how people process financial concepts can affect their financial literacy, which is the primary factor of financial capability.

This study considers two (2) generational cohorts (Gen X and Y) as moderators. Gen X refers to people born between 1960-1980, while Gen Y refers to people born between 1981-1990 (Hernando et al., 2019). Various authors contend that Gen Y is more proficient in using the Internet than Gen X (e.g., Bento et al., 2018) because millennials (Gen Y) grew up with technology (Boonsiritomachai & Pitchayadejanant, 2019). It was found in a study that people who use the Internet as their primary financial information source exhibit higher financial literacy (Aw and Sabri, 2019) – better financial knowledge, attitudes, and behavior. The Internet also provides better access to financial products and services, which expands financial inclusion and positively affects financial capability.

According to the Philippine News Agency (2021), some think millennials are squandering their time on irrelevant matters, even during the pandemic. However, this is contrary to the findings of a study done by a life insurer, which revealed that Gen Y, or the millennials, are "very conscious" about securing their financial health compared to other generations (Villanueva, 2021). These findings reflect a better financial attitude and behavior of Gen Y over Gen X.

On the other hand, according to TransUnion's Consumer Pulse (2021), the middle generations (Gen X and Y) intend to use money from savings, refinance or renegotiate payments/rates, and take out a personal loan more than other generations would be able to pay their bills and loans. Gen X is much more willing to do the mentioned financing activities between these middle generations than Gen Y.

In addition to this, it was found in the Visa Consumer Payment Attitudes Study (as noted by Puriwat and Tripopsakul, 2021) that "Generation X" is the new "emerging market" for new payment methods due to their collective purchasing power accounts for much of electronic payment in the Philippines, resulting into growth opportunities for businesses at the time when "Generation Y" comes of age. This study demonstrates that 7 out of 10 Filipinos of Gen X prefer to pay using cards over cash for safety reasons, compared to 6 out of 10 among Gen Y. The use of cards and other electronic cashless payments is a sign of better financial inclusion or more convenient access to financial products and services.

From these opposing studies, the proponent aimed to determine if there are significant differences between the financial capability of Gen X and Gen Y since the results of the current studies vary for both generational cohorts.

Thus, new hypotheses are proposed:

H5a. The generation cohort (Gen. X and Y) moderates the relationship between financial knowledge and financial capability.

H5b. The generation cohort (Gen. X and Y) moderates the relationship between financial behavior and financial capability.

H5c. The generation cohort (Gen. X and Y) moderates the relationship between financial attitude and financial capability.

H5d. The generation cohort (Gen. X and Y) moderates the relationship between financial inclusion and financial capability.

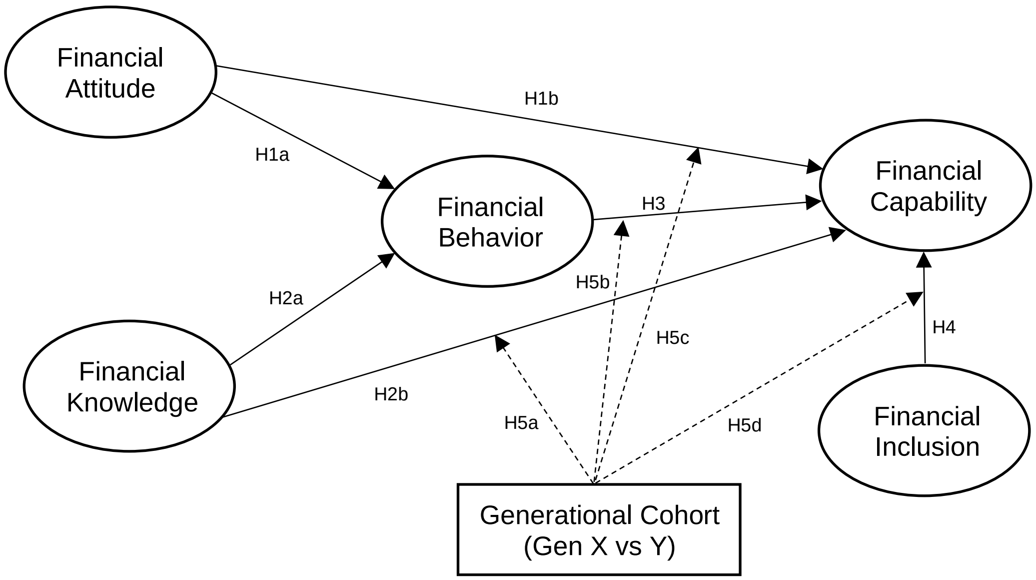

Figure 1. *Conceptual Framework*

The study conceptualizes the effect of financial literacy and financial inclusion on financial capability moderated by generational cohort (Gen X and Y).

In Figure 1, Financial Literacy is represented by financial attitude, financial behavior, and financial knowledge (Huston, 2010). First, the researcher will determine how financial attitude affects financial behavior which affects financial capability by assessing the feelings of respondents towards investment and other money- related knowledge (affective). Moreover, the direct influence of financial attitude on financial capability. Second, by looking into the beliefs of the respondents about financial matters (cognitive), the researcher will determine the effect of financial knowledge on financial behavior that affects financial capability. Also, the direct influence of financial knowledge on financial capability. Third, the direct influence of financial behavior on financial capability.

Aside from the influences of the key components of financial literacy on financial capability. The researcher will also determine the direct effect of financial inclusion on financial capability. All these correlations will be moderated by generational cohort to determine the differences on the result when it is gathered from Gen X and from Gen Y and to correct misconceptions on various financial facts and responsibilities (conative) of these generations.

METHOD

Participants of the Study

The participants in the study consisted of two hundred fifty (250) working individuals from the province of Pampanga, Philippines, who were categorized into two generational cohorts: Generation X (born between 1960 and 1980) and Generation Y (born between 1981 and

1990). The participants were selected from both the private and public sectors, covering various industries such as IT, Education, Healthcare, Tourism, Finance & Accounting, Office/Clerk, Trade/Merchandising, Manufacturing, Sales/Advertising, Real Estate, Telecom, Arts & Design, and others. Additionally, participants included individuals from different management positions (Rank-and-File, Supervisory, Managerial, and Self-Employed) and a range of educational backgrounds, from Junior High School to Doctorate degrees. The respondents also represented a mix of marital statuses, monthly income levels, and gender distributions.

Research Instrument

The research instrument used in the study was an adapted research questionnaire previously employed by Gentjan (2021) in a study focused on financial literacy, financial inclusion, and financial capability. The questionnaire was subjected to rigorous validation and reliability testing, which included face and content validity assessments and Cronbach's alpha reliability testing. The reliability index was set within the acceptable range of 0.7 to 0.9.

The questionnaire consisted of two parts:
1. Part A: Respondents' Profile - This section collected demographic information about the participants, including generational cohort, gender, civil status, sector (private or government), industry, management position, educational attainment, and monthly income.
2. Part B: Financial Background - This section assessed the respondents' financial background and behavior. It included a series of statements measured using a Likert scale, where respondents could express their agreement or disagreement with each statement. The Likert scale ranged from 1 (Strongly Disagree) to 5 (Strongly Agree), with intermediate options for varying degrees of agreement.

Data Analysis

The researcher utilized Partial Least Squares Structural Equation Modeling (PLS-SEM) as the primary statistical approach for analyzing the data. PLS-SEM is known for its suitability in handling complex models and its flexibility in terms of data requirements and measurement specification. It allows for the examination of latent relationships between observed and latent variables, making it well-suited for this study's research model, which involved financial attitude, knowledge, behavior, capability, and inclusion while considering generational cohorts.

The data analysis process included several steps, such as:
1. Principal Components Analysis: To identify underlying patterns and relationships among variables and reduce multicollinearity.
2. Confirmatory Factor Analysis: To assess the validity and reliability of the measurement model, ensuring that the items accurately reflected the latent constructs.
3. Structural Equation Modeling: To examine the structural relationships between the latent constructs (financial attitude, knowledge, behavior, capability, and inclusion) and test the research hypotheses.

The researcher also adhered to ethical considerations, ensuring that participation in the study was voluntary, and participants were informed of their rights to withdraw from the study at any time without facing negative consequences. Additionally, the study complied with privacy and confidentiality regulations, as stipulated by RA 10173, which governs data privacy in the Philippines.

RESULTS AND DISCUSSION

Partial least squares–structural equation modeling (PLS-SEM) was utilized to assess the research hypothesis. In PLS-SEM, the first step is assessing the measurement model, wherein the reliability and validity of the latent constructs are established. On the one hand, the second step is the evaluation of the structural model, where structural relationships of the hypothesized model are examined.

Assessment of the Measurement Model

The assessment of the measurement model involves the evaluation of the reliability and validity of the latent constructs used in the study. In measuring the reliability or internal consistency of items of each construct, Cronbach's alpha (CA) and composite reliability (CR) were gauged. According to Kock (2014), the value of CA and CR must be at least 0.70 to claim that the latent constructs are reliable. Based on the results in Table 1, all variables – financial capability (CA = 0.768, CR = 0.867), financial attitude (CA = 0.879, CR = 0.918), financial knowledge (CA = 0.874, CR = 0.909), financial behavior (CA = 0.912, CR = 0.935), and financial inclusion (CA = 0.711, CR = 0.874) are within the acceptable values for reliability.

Regarding convergent validity, factor loadings and average variance extracted (AVE) were assessed. Kock and Lynn (2012) noted that each factor loading must be at least 0.50 and must be significant ($p < 0.05$) to establish convergent validity in variables. Moreover, each latent construct must exhibit an AVE of at least 0.50. Based on the results in Table 1, all latent constructs passed the requirements for convergent validity. This finding means that variables are correlated to each other. Thus, it is valid to measure what it is supposed to measure. Previous studies (Cera et al., 2021; Gentjan, 2021; Aw et al., (2019); Iramani & Lutfi, 2021; Potocki & Cierpiał- Wolan, 2019; Grable et al., 2020; Białowolski et al., 2021) had also confirmed this convergence among variables. It shows that the test designed to assess the latent construct correlates with other tests from prior studies assessing the same construct.

Table 1. *Convergent Validity and Reliability Measures of the Constructs*

Construct	Item	Factor loading	Average Variance Extracted	Cronbach's Alpha	Composite Reliability
Financial capability			0.686	0.768	0.867
	FC1	0.853			
	FC2	0.751			
	FC3	0.874			
Financial attitude			0.737	0.879	0.918
	FA1	0.890			
	FA2	0.917			`
	FA3	0.865			
	FA4	0.752			
Financial knowledge			0.666	0.874	0.909
	FK1	0.817			
	FK2	0.753			
	FK3	0.839			
	FK4	0.847			
	FK5	0.822			
Financial behavior			0.741	0.912	0.935
	FB1	0.842			
	FB2	0.834			
	FB3	0.841			
	FB4	0.898			
	FB5	0.889			
Financial inclusion			0.776	0.711	0.874
	FI1	0.881			
	FI2	0.881			

Note: *Factor loadings are significant ($p < 0.001$).*

Regarding convergent validity, factor loadings and average variance extracted (AVE) were assessed. Kock and Lynn (2012) noted that each factor loading must be at least 0.50 and must be significant ($p < 0.05$) to establish convergent validity in variables. Moreover, each latent construct must exhibit an AVE of at least 0.50. Based on the results in Table 1, all latent constructs passed the requirements for convergent validity. This finding means that variables are correlated to each other. Thus, it is valid to measure what it is supposed to measure. Previous studies (Cera et al., 2021; Gentjan, 2021; Aw et al., (2019); Iramani & Lutfi, 2021; Potocki & Cierpiał- Wolan, 2019; Grable et al., 2020; Białowolski et al., 2021) had also confirmed this convergence among variables. It shows that the test designed to assess the latent construct correlates with other tests from prior studies assessing the same construct.

Table 2. *Discriminant Validity of the Constructs*

	FC	FA	FK	FB	FI
FC					
FA	0.797				
FK	0.732	0.806			
FB	0.756	0.826	0.802		
FI	0.107	0.042	0.150	0.108	

Note: *FC – financial capability; FA – financial attitude; FK – financial knowledge; FB – financial behavior; FI – financial inclusion.*

Concerning discriminant validity, the heterotrait-monotrait ratio of correlations (HTMT) was evaluated. According to Clark and Watson, the conservative threshold for HTMT is 0.85. Based on the results in Table 2, all latent constructs have HTMT below 0.85; hence, discriminant validity was established. This finding means that each variable is distinctive from other measured variables. Thus, a latent variable is proven to be able to account for more variance in the observed variables linked with it. It is significant because it tells if the test accurately targets the construct of interest.

Evaluation of the Structural Model

Figure 1 and Table 3 present the results of the hypothesis testing for direct effects. Data analysis showed that financial attitude significantly and positively influences financial behavior (β = 0.456, $p < 0.001$, f2 = 0.339) and financial capability (β = 0.353, $p < 0.001$, f2 = 0.236) with large and medium effect sizes, respectively. Therefore, H1a and H1b are supported.

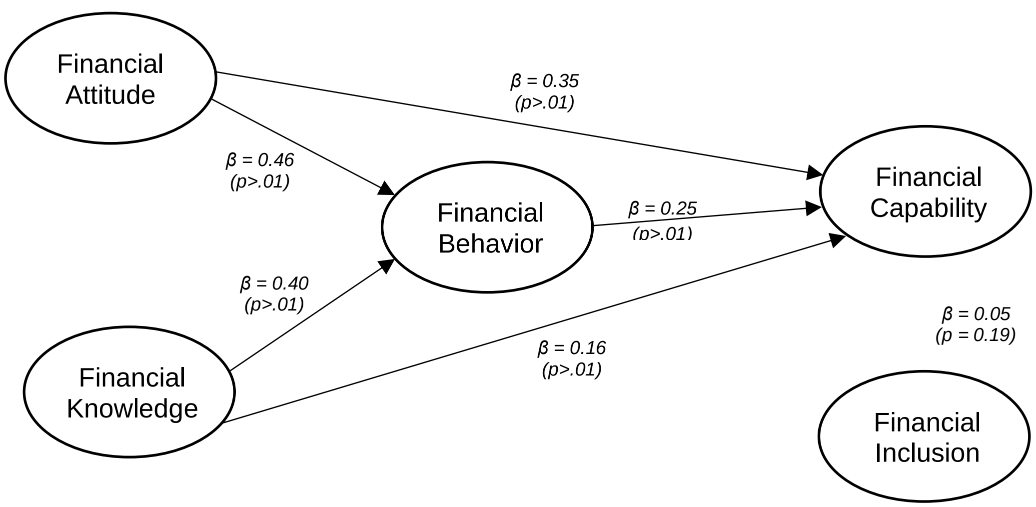

Figure 2. *The Structural Model of the Study*

Moreover, the findings revealed that financial knowledge has a significant and positive influence on financial behavior (β = 0.397, $p < 0.001$, f2 = 0.289) and financial capability (β = 0.162, $p = 0.004$, f2 = 0.099) with medium and small effect sizes respectively. Hence, H2a and H2b are supported.

In terms of financial behavior and financial capability, these two constructs were found to be significantly and positively related (β = 0.247, p < 0.001) with a medium effect size (f2 = 0.159). On the Contrary, financial inclusion had no significant effect on financial capability (β = 0.055, p = 0.192). Thus, H3 is supported while H4 is not.

To evaluate the moderating effects of the generational cohort (Generation X vs. Y), multigroup analysis (MGA) was performed since the generational cohort is a categorical variable. The first step in performing MGA is to run a robustness test using measurement invariance. In MGA, a measurement invariance test is required (Memon et al., 2019). In the present study, constrained latent growth with loadings using WarpPLS 8.0 was the analysis method used to gauge measurement invariance (Kock, 2014).

Table 3. *Hypothesis Testing – Direct Effects*

Hypothesis	ρ	p- value	σ	Effect size	Decision
H1a. FA → FB	0.456	<0.001	0.058	0.339	Supported
H1b. FA → FC	0.353	<0.001	0.060	0.236	Supported
H2a. FK → FB	0.397	<0.001	0.059	0.289	Supported
Hb. FK → FC	0.162	0.004	0.062	0.099	Supported
H3. FB → FC	0.247	<0.001	0.061	0.159	Supported
H4. FI → FC	0.055	0.192	0.063	0.017	Not supported

Note: *H = Hypothesis, ρ = Path Coefficient, σ = Standard Error*
Effect sizes assessment: 0.02 – small; 0.15 – medium; 0.35 – large (Cohen, 1988). FC – financial capability; FA– financial attitude;
FK – financial knowledge; FB – financial behavior; FI – financial inclusion.

Table 4. *Measurement Invariance Test Results*

Construct	Item	Absolute latent Growth coefficients	p-values (2-tailed)
Financial capability			
	FC1	0.003	0.962
	FC2	0.010	0.873
	FC3	0.006	0.928
Financial attitude			
	FA1	0.022	0.723
	FA2	0.014	0.822
	FA3	0.025	0.689
	FA4	0.015	0.816
Financial knowledge			
	FK1	0.055	0.382
	FK2	0.010	0.876
	FK3	0.022	0.726

	FK4	0.012	0.852
	FK5	0.011	0.864
Financial behavior			
	FB1	0.010	0.873
	FB2	0.004	0.947
	FB3	0.033	0.596
	FB4	0.018	0.776
	FB5	0.008	0.901
Financial inclusion			
	FI1	0.004	0.945
	FI2	0.004	0.945

Table 5. *Moderation via Multigroup Analysis*

Hypothesis	Gen X	Gen Y	Absolute latent growth coefficient	P-value (one- tailed)	T-ratio	Decision
GC*FA → FC	0.502	0.149	0.060	0.170	0.953	Not significant
GC*FK → FC	0.068	0.272	0.039	0.268	0.618	Not significant
GC*FB → FC	0.197	0.342	0.037	0.278	0.590	Not significant
GC*FI → FC	-0.006	0.161	0.242	<0.001	3.988	Significant

Note: *GC – generational cohort (X & Y).*

As seen in Table 4, all items showed no significant difference in the absolute latent growth coefficients for loadings between generation X and Y respondents. Hence, the model did not detect measurement invariance (Kock, 2022).

Since the absence of measurement invariance was already established, MGA using a constrained latent growth method was executed. The results in Table 5 revealed a significant difference in the relationship between financial inclusion and financial capability between Generation X and Y respondents (ALGC = 0.242, $p < 0.001$). This finding signifies that, among the identified relationships, only the link between financial inclusion and financial capability differs between Generation X and Y participants.

Influence of Financial Attitude on Financial Behavior

Among financial literacy components, financial attitude demonstrated significant, large, and positive influences on financial behavior. Therefore, financial attitude is crucial in shaping an individual's financial behavior. Prior studies stated that attitude is an essential factor in understanding behavior (Ajzen, 2020) and financial attitudes are drastically related to financial management behavior (Yap et al., 2018; Totenhagen et al., 2019; Shih et al., 2022; Sample and Warland as cited by Dagosta, 2020; Iramani & Lutfi, 2020).

Influence of Financial Attitude on Financial Capability

Financial attitude also significantly, substantially, and positively affected financial capability. Thus, financial attitude is classified as one of the formative factors of financial capability because an individual who can make sound final decisions can be labeled as financially capable. This finding is supported by Serido et al. (as cited by Ranta and Salmela-Aro, 2018) by formulating the conceptual model of young adults' financial capability, which emphasizes that financial attitudes positively affect financial well-being through responsible financial practices, consequently improving the financial capability of an individual.

Influence of Financial Knowledge on Financial Behavior

The findings also revealed that financial knowledge significantly and positively influences financial behavior. This result indicates a strong correlation between a person's financial knowledge and financial behavior, which allows them to plan their payments, save for emergencies, invest wisely, and create financial objectives. Precedent research likewise found that financial knowledge is associated with financial behavior (Civelek et al., 2019; Kalmi, 2018; Moreland, 2018) either for the long term and short term, or both (Kim et al., 2019). In addition to that, retirement planning and financial product investments are more successful when the investor has broader financial knowledge (Grable et al., 2020; Cera et al., 2021).

Influence of Financial Knowledge on Financial Capability

The result further revealed that financial knowledge also showed a small but significant effect on financial capability. This result indicates that if an individual has a deeper understanding of financial products, most likely, this financial knowledge can have a positive effect on that person's financial capability as it allows an individual to use or avail of financial products and services because they understand the pros and cons of that action. Prior studies even stated that an individual's knowledge of financial markets and systems is essential to financial capability (Panos & Wilson, 2020; Mitchell & Lusardi, 2022). Persistence to learn financial concepts with improved attitudes and behaviors may result in enhanced financial capability (Batty et al., 2015, as cited by Cera et al., 2021).

Influence of Financial Behavior on Financial Capability

The findings also revealed that financial behavior drastically and positively affects financial capability. The results manifest that favorable and less risky financial behaviors result in higher financial capability. Various studies (Potocki & Cierpiał-Wolan, 2019; Çera et al., 2021) supported that financial capability is measurable through financial behavior. For instance, interventions were designed to develop consumer financial capability by either building financial management skills or increasing their capacity for solid financial management behaviors. Moreover, outcomes will improve financial capability by focusing on education and intervention programs emphasizing behavioral changes (Birkenmaier et al.,2022).

Influence of Financial Inclusion on Financial Capability

It was found that financial inclusion does not significantly affect financial capability. The results show that financial inclusion has no substantial effect on financial capability. It negates the studies of Cera et al. (2021) and Goyal and Kumar (2021), where the authors argue that financial inclusion is essential in building financial capability. Arnold and Venkatesan (2021) further argue that the idea of financial inclusion is crucial when it comes to the progress and improvement of financial capability as according to Elsayed (2020), poor financial inclusion refers to people's inability to access and use financial services, which prevents them from effectively saving their money, preparing for cost- effective borrowing, and protecting themselves and their families from basic disasters such as hunger, crime, and natural disaster. Because of different findings from present and previous studies on the influence of financial inclusion on financial capability, further studies can be done by other researchers and scholars.

Moderating Effect of Generational Cohort X and Y

The findings indicated that the generational cohort needs to moderate the relationship between the financial literacy component (financial attitude, financial knowledge, and financial behavior) and financial capability. The result suggests that the respondent's generational cohort does not alter the effect of financial literacy on financial capability. Therefore, H5a, H5b, and H5c are not supported.

Lastly, the indirect effect of the generational cohort between financial inclusion and financial capability is statistically significant. These results manifest that the generational cohort moderates the relationship between financial inclusion and financial capability. The result suggests that the effect of respondent's financial inclusion on their financial capability differs depending on their generational cohort. It validates the study of Puriwat and Tripopsakul (2021), affirming that "Generation Y," the Digital Natives, has better financial inclusion than Generation X for using new payment methods such as cards and cashless payment, which provide more convenient access to financial products and services, which makes Gen Y more financially capable. Therefore, H5d is supported.

Conclusion

The present study aimed to investigate the influence of financial literacy components, specifically financial attitude, financial behavior, and financial knowledge, on financial capability among Generation X (Gen X) and Generation Y (Gen Y) individuals. Additionally, the study explored the moderating role of generational cohort on the relationship between financial literacy and financial capability and examined the impact of financial inclusion on financial capability. The findings shed light on the complex interplay of these factors in shaping individuals' financial well-being.

The results of this study indicate a significant and positive influence of financial attitude on both financial behavior and financial capability. These findings support the notion that an individual's attitude towards money and finances plays a crucial role in shaping their financial behavior and, consequently, their overall financial capability. A positive financial attitude fosters responsible financial practices and decision-making, ultimately leading to higher financial capability. This underscores the importance of promoting a positive financial mindset and values in financial education and awareness programs.

Financial knowledge was found to have a significant and positive impact on both financial behavior and financial capability. This suggests that individuals with a better understanding of financial concepts and products are more likely to exhibit responsible financial behaviors and possess greater financial capability. While the effect size of financial knowledge on financial capability was relatively small, it remains a valuable factor in enhancing one's financial well-being. Therefore, efforts to improve financial literacy, especially in terms of knowledge, should continue to be a priority in financial education initiatives.

The study's results highlight the strong positive relationship between financial behavior and financial capability. Individuals who engage in favorable and less risky financial behaviors tend to have higher financial capability. This finding underscores the importance of encouraging and cultivating responsible financial behaviors among the population. It also suggests that financial capability can be enhanced through interventions that focus on improving financial behaviors, such as budgeting, saving, and investing wisely.

Contrary to expectations, the study did not find a significant impact of financial inclusion on financial capability. This result may be attributed to the relatively low level of financial inclusivity in the province of Pampanga, where the study was conducted. It implies that access to financial products and services alone may not be sufficient to improve financial capability unless accompanied by efforts to enhance financial literacy and promote responsible financial behaviors. Future research should investigate the role of financial inclusion in different geographical areas and consider its interaction with financial literacy components.

The study explored the moderating role of generational cohort (Gen X and Gen Y) on the relationship between financial literacy and financial capability. Surprisingly, the generational cohort did not significantly alter the impact of financial attitude, financial behavior, or financial knowledge on financial capability. This suggests that the influence of financial literacy on financial capability remains consistent across these generational cohorts. It is essential to note that both Gen X and Gen Y are susceptible to the same financial challenges and opportunities, emphasizing the universality of financial education and its benefits.

However, the study did find a moderating effect of generational cohort on the relationship between financial inclusion and financial capability. This implies that the impact of financial inclusion on financial capability varies between Gen X and Gen Y. Further research is needed to explore the specific factors contributing to this variation and to develop targeted interventions to improve financial capability within each generation.

Limitations and Recommendations for Future Research

Financial education programs should promote positive financial attitudes, enhance financial knowledge, and foster responsible financial behaviors. These programs should target individuals across different generational cohorts to ensure broad and lasting financial literacy improvements. Integrating financial education into the school curriculum, particularly at the secondary level, can equip young learners with essential financial knowledge and skills. Involving parents, who often belong to Gen X and Gen Y, in financial education initiatives can also be beneficial.

Policymakers and financial institutions should work to improve financial inclusion, especially in underserved areas and provinces. Access to financial products and services should be expanded, accompanied by efforts to raise financial awareness and literacy. Interventions aimed at enhancing financial capability should consider generational differences and tailor strategies to address the unique needs and challenges faced by Gen X and Gen Y. These interventions can be informed by the moderating effects observed in this study.

Future research should explore the interaction between financial inclusion and financial literacy in different contexts and regions. Additionally, investigations into the effectiveness of specific interventions in improving financial capability within each generational cohort are warranted.

REFERENCES

Adiputra, I. G. (2021). The influence of financial literacy, financial attitude and locus of control on financial satisfaction: Evidence from the community in Jakarta. *KnE Social Sciences*, *5*(4), 636–654.

Arofah, A. A., Purwaningsih, Y., & Indriayu, M. (2018). Financial literacy, materialism and financial behavior. *International Journal of Multicultural and Multireligious Understanding*, *5*(4), 170–177. https://doi.org/10.18415/ijmmu.v5i4.171

Aw, E. C., & Sabri, M. F. (2019). Financial literacy and related outcomes: The role of financial information sources. *International Journal of Business and Society*, *20*(1), 286–298.

Beck, J. J., & Garris, R. O., III. (2019). Managing personal finance literacy in the United States: A case study. *Education Sciences*, *9*(2), 129. https://doi.org/10.3390/educsci9020129

Białowolski, P., Cwynar, A., & Cwynar, W. (2021). Decomposition of the financial capability construct: A structural model of debt knowledge, skills, confidence, attitudes, and behavior. *Journal of Financial Counseling and Planning*, *32*(1), 5–20. https://doi.org/10.1891/JFCP-19-00056

Birkenmaier, J., & Fu, J. (2020). Financial behavior and financial access: A latent class analysis. *Journal of Financial Counseling and Planning*, *31*(2), 179–192. https://doi.org/10.1891/JFCP-18-00067

Business World. (2022). Filipinos' financial literacy needs more push, Home Credit survey reveals. https://www.bworldonline.com/filipinos-financial-literacy-needs-more-push-home-credit-survey-reveals/

Çera, G., Khan, K. A., Mlouk, A., & Brabenec, T. (2021). Improving financial capability: The mediating role of financial behaviour. *Economic Research-Ekonomska Istraživanja*, *34*(1), 1265–1282. https://doi.org/10.1080/1331677X.2020.1820362

Chen, Z., & Lemieux, C. M. (2016). Financial knowledge and behaviors of Chinese migrant workers: An international perspective on a financially vulnerable population. *Journal of Community Practice*, *24*(4), 462–486.

Civelek, M., Ključnikov, A., Krajčík, V., & Zufan, J. (2019). The importance of discount rate and trustfulness of a local currency for the development of local tourism. *Journal of Tourism and Services*, *10*(19), 77–92. https://doi.org/10.29036/jots.v10i19.117

de Castro, N., Salamat, L., & Tabor, M. (2020). Financial literacy of young professionals in the Philippines. *EPRA International Journal of Research and Development*, *5*(3), 217–220.

Dua, S., Rai, K., & Yadav, M. (2019). Association of financial attitude, financial behaviour and financial knowledge towards financial literacy: A structural equation modeling approach. *Vision: The Journal of Business Perspective*, *23*(4), 331–340. https://doi.org/10.1177/2319714519826651

Farida, M. N., Soesatyo, Y., & Aji, T. S. (2021). Influence of financial literacy and use of financial technology on financial satisfaction through financial behavior. *International Journal of Education & Literacy Studies*, *9*(3), 70–76. https://doi.org/10.7575/aiac.ijels.v.9n.3p.70

Faulkner, A. (2021, December 12). Financial literacy around the world: What we can learn from the national strategies and contexts of the top ten most financially literate nations. *The Reference Librarian*, *62*(3–4), 129–141. https://doi.org/10.1080/02763877.2021.2009955

Goyal, K., & Kumar, S. (2020). Financial literacy: A systematic review and bibliometric analysis. *International Journal of Consumer Studies*, *44*(6), 501–517. https://doi.org/10.1111/ijcs.12519

Grable, J. E., Archuleta, K. L., Ford, M. R., Kruger, M., Gale, J., & Goetz, J. (2020). The moderating effect of generalized anxiety and financial knowledge on financial management behavior. *Contemporary Family Therapy*, *42*, 15–24. https://doi.org/10.1007/s10591-019-09511-9

Hani, A. (2021). The Philippines to further national financial literacy. *OpenGov Asia*. https://opengovasia.com/the-philippines-to-further-national-financial-literacy/

Ho, C. S. M., & Lee, H. L. D. (2020). Integrating positive financial attitudes to nurture students' identity as informed financial decision-makers in high power distance Chinese contexts. *Journal of Educational Change*, *22*(2), 247–270. https://doi.org/10.1007/s10833-020-09396-x

Huang, J., Sherraden, M., Sherraden, M. S., & Johnson, L. (2022). Effective finance to increase financial well-being for low-income families: Empirical examination and policy implications. *Journal of Consumer Affairs*, *56*(2), 671–696. https://doi.org/10.1111/joca.12365

Huston, S. J. (2010). Measuring financial literacy. *Journal of Consumer Affairs*, *44*(2), 296–316. https://doi.org/10.1111/j.1745-6606.2010.01170.x

Iramani, R., & Lutfi, L. (2021). An integrated model of financial well-being: The role of financial behavior. *Accounting*, *7*(3), 691–700.

Jorgensen, B. L., Allsop, D. B., Runyan, S. D., Wheeler, B. E., Evans, D. A., & Marks, L. D. (2019). Forming financial vision: How parents prepare young adults for financial success. *Journal of Family and Economic Issues*, *40*(3), 553–563.

Kamarudin, M. F., Sahudin, Z., Wahid, Z. A., Yahya, N. C., & Khamis, M. R. (2021). Individuals' decision in choosing investment instruments. *Global Business & Management Research: An International Journal*, *13*(4), 1–11.

Once, F., Gabon, V., Cruz, J. D., Gabon, R., & Mustacisa-Lacaba, M. (2019). Financial literacy and satisfaction of beneficiaries to Pantawid Pamilyang Pilipino Program (4Ps): Evidence from the poorest countryside areas of the Philippines. *Countryside Development Research Journal*, *7*(1), 27–35.

Potocki, T., & Cierpiał-Wolan, M. (2019). Factors shaping the financial capability of low-income consumers from rural regions of Poland. *International Journal of Consumer Studies*, *43*(2), 187–198. https://doi.org/10.1111/ijcs.12500

Saini, B., & Rani, R. (2022). Study on financial literacy. *International Research Journal of Management Science & Technology*, *13*(1), 1–12.

Standard & Poor. (2014). *S&P Global Financial Literacy Survey*. https://gflec.org/initiatives/sp-global-finlit-survey/

Talwar, M., Talwar, S., Kaur, P., Tripathy, N., & Dhir, A. (2020). Has financial attitude impacted the trading activity of retail investors during the COVID-19 pandemic? *Journal of Retailing and Consumer Services*, *58*, 102341. https://doi.org/10.1016/j.jretconser.2020.102341

Tilan, A. S., Cabal, E. M., & Landa, R. M. (2021). Financial literacy of Filipino public school teachers and employees: Basis for intervention program. *International Journal of Science and Research*, *10*(6), 1–5.

Yap, R. J. C., Komalasari, F., & Hadiansah, I. (2019). The effect of financial literacy and financial management behavior on retirement confidence. *International Journal of Administrative Science & Organization*, *23*(3), 90–97. https://doi.org/10.2991/piceeba-19.2019.90