What factors influence the level of engagement of individuals in a banking relationship in Jordan?

Nawal Tarazi[1]

Abstract

The Central Bank of Jordan (CBJ) presented a study report (NFIS 2018-2019) in collaboration with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH highlighting that 67% of people in Jordan above the age of 15 do not have access to the formal financial system in terms of bank account ownership. Only 33% of adults in Jordan, among whom only 27% of women, are considered financially included. This percentage is considered low even when compared to other countries with the same income level.

The research study employed a non-probability sample of 542 individuals to obtain a comprehensive understanding of the individual and social factors that influence the level of engagement of individuals in a banking relationship. The Theory of Planned Behavior (TPB) is the base theory underpinning this research. The Partial Least Squares Structural Equation Modelling method (PLS SEM) was employed for quantitative analysis. The findings affirm key independent factors including economic knowledge, age, income, financial literacy, economy, financial technology, and trust affect the level of engagement of individuals in a banking relationship in Jordan highlighting the gender differences. Engagement leads to more sustainability and development, thus improving financial inclusion in the country. The results can serve as practical guidelines for bank managers, regulators, and policymakers.

Keywords: Engagement, banking relationship, financial behavior, theory of planned behavior (TPB).

Background

A banking relationship as described by Petersen, & Rajan, (1994) is a close relationship and continued interaction over time, involving multiple products. Sashi's (2012) definition of customer engagement focuses on satisfying customers by providing greater value when compared to competitors, this satisfaction builds trust and commitment in long-term relationships, thus leading to a higher level of engagement in the long term. Tezel (2015) and Özmete (2015) define financial behavior as a behavioral economic decision. The skills, abilities, attitudes, and patterns of this behavior are essential for making the right financial decisions both on a personal and social scale (Atkinson and Messy, 2012). The most important component of financial skills is financial literacy as highlighted by Csiszárik Kocsir et al. (2017) and confirmed by Xu & Zia (2012) who state that financial skills are not inborn skills, they are acquired, which supports the importance of financial literacy.

The financial sector is considered the backbone of any economy. Development, growth, and achievements of the financial sector are reflected in other sectors of the economy. Several studies including Levine (2005), Bencivenga and Smith (1991), King and Levine (1993), Odedokun (1998), Xu (2000), and Shamim (2007) empirically found a correlation between financial development and economic growth.

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[1] *Nawal Tarazi is Head of Department and Adjunct Professor at the International Institute in Geneva.*

According to the Association of Banks in Jordan 2021 Annual Report, there are twenty-three banks operating in Jordan as of year-end 2021. Thirteen are commercial Jordanian banks, six foreign banks and four are Islamic banks. As of year-end 2021, the total assets of banks operating in Jordan reached JD 61.06 billion (USD 86.12 billion) and direct credit facilities granted by banks reached JD 30.03 billion (USD 42.36 billion). According to the Central Bank of Jordan (2022), Financial Inclusion is the state wherein individuals and businesses have convenient access to and use affordable and suitable financial products and services, payments, savings, credit, transactions, and insurance that meet their needs, help to improve their lives, and are delivered in a responsible and sustainable way. Jordan's policymakers are aware of the importance of the inclusion strategy and are committed to following and realizing the economy's objective of sustainability and growth.

The Financial Inclusion Diagnostic Study in Jordan for the year 2017 (Central Bank of Jordan, 2018) stated that the level of formal financial inclusion in Jordan is quite low for some types of financial products and among certain segments of the population. The World Bank Global Findex's Database reported that only 25% of Jordanians above 15 years of age had a bank account in 2014, with a much lower rate for women (15.5%) than for men (33.3%). This percentage increased to 42.5% account owners in 2017 (26.6% women vs. 56.3% men) and 47% in 2021 (34% women compared to 58.6% men) (The World Bank, 2021; Development Research Group, 2022).

A study conducted by the Central Bank of Jordan (CBJ) in cooperation with Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH (NFIS 2018-2019) prompted the Jordanian authorities to act and try to understand the reasons for low financial inclusion in Jordan. Their objective was to find ways to boost the availability and the quality of financial services. It stemmed from their belief that low financial inclusion as reflected in the low level of engagement in financial behavior represented in the form of bank account ownership has severe consequences on the economy in general and more specifically on the banking sector. The intention of behavioral change was asserted by actions taken by the highest authorities and national-level policymakers including the Central Bank that strongly believed in the seriousness of the issue.

Earlier studies on the financial behavior of individuals and their level of engagement in a banking relationship were limited in scope and depth. Existing literature on the topic focuses mostly on aspects related to relationship behavior and customer satisfaction once the banking relationship has been established. Fewer studies consider studying the antecedent factors that affect the behavior of individuals establishing a banking relationship and enhancing their engagement. There is thus a gap in the current body of knowledge which this research endeavors to address.

The primary aim of this research is to determine the main antecedents, individual and social factors, that impact the level of engagement of individuals in a banking relationship in Jordan. The Theory of Planned Behavior (TPB) (Ajzen, 2019) is the base theory that acknowledges the role of social reality and provides a basis for understanding causal relationships. The factors explored within the research are age, income, education, economy, economic knowledge, financial literacy, financial technology, and trust, in addition to gender. The objective of identifying and understanding the role of these factors can help to shed light on the reasons behind the relatively low level of engagement of individuals with the banking system in Jordan. The research also seeks to suggest means and tools of intervention to encourage greater financial engagement.

Moreover, the research pays specific attention to the influence of 'Gender' on the above factors. It also places a particular emphasis on investigating the influence of financial literacy in enhancing the level of individuals' behavioral engagement in a banking relationship.

The objectives of the research are:

1. To determine the individual and social factors that enhance the level of engagement of individuals in a banking relationship.
2. To examine the influence of financial literacy in enhancing the level of behavioral engagement of individuals in a banking relationship.
3. To investigate the influence of 'Gender' and if the above dynamics vary by gender.

Examining interventions from independent variables to core variables (control beliefs) that would lead to changes in the financial behavior is a fairly new perspective that has been adopted in earlier studies but only on a very limited scale. This research addressed this gap by incorporating research literature on behavioral change that lead individuals to alter their financial behavior through improved engagement in a banking relationship, thus impacting the sector and eventually the economy.

Literature Review

The TPB was initially presented in Ajzen and Fishbein's 1972 expectancy value model of attitude which was then expanded and presented by Ajzen (1991). This theory highlights the significance of beliefs in shaping human behavior. According to the TPB, the three types of beliefs are behavioral beliefs, normative beliefs, and control beliefs. The strength of these beliefs is associated with the perceptions of behavioral control or what the TPB presents as perceived behavioral control (PBC), given that attitudes, subjective norms, and perceived behavioral control represent the three conceptual independent determinants of intention, whereas the actual behavioral control is directly related to perceived behavioral control. The TPB indicated that the engagement in a behavior is influenced both by intentions and PBC which should be assessed fairly towards a specific behavior to realistically reflect the actual control over that behavior.

According to the TPB, individuals' behavioral intention is expected to lead to the final behavior. Intention can be defined as follows: how ready an individual is to perform a certain behavior based on attitude, subjective norms, and perceived behavioral control (Ajzen, 2002). Some studies such as Sahoo and Pillai (2017) and Kosiba et al. (2018) presented evidence on limited drivers and outcomes of customer engagement in some banking services. This research contributes to the understanding of the individual and social factors and will determine their effectiveness on individuals' financial behavior in terms of level of engagement in a banking relationship.

Several studies argued the important role played by financial literacy and its influence on financial behavior. Supporting the study's objectives, Andarsari and Ningtyas (2019) reported a positive and significant influence of financial literacy on financial behavior. The same study reported that women are expected to lead the future of the world's economy by 2028 and are expected to take 75% of the world's discretionary expenditure. The engagement concept is adopted in this research as an important component of customer relationship management and is directly related to consumer behavior in terms of active and engaged purchase of a service or product.

Based on the findings from the preceding literature review (Ji and Wang, (2014), Mittal et al. (2005), McDonald & Rundle (2008) supported by Freeman's (1984), Tezel (2015), Mthembu

(2014), Geva (2001), Demirgüç-Kunt (2018), as well as LaMorte, (2022)), and within the parameters of this research, the engagement in a banking relationship is determined by the ownership of an account at a bank, and the level of engagement is defined as the intensity of an individuals' usage of banking services. Thus, supporting the concept of banking relationship that starts with an account opened in the name of a customer regardless of its type. The engagement is the customer's financial behavior which is driven by the expectation of financial assistance and practicality of financial services, the aim of which is to ease financial pressure, provide support, and facilitate financial operations.

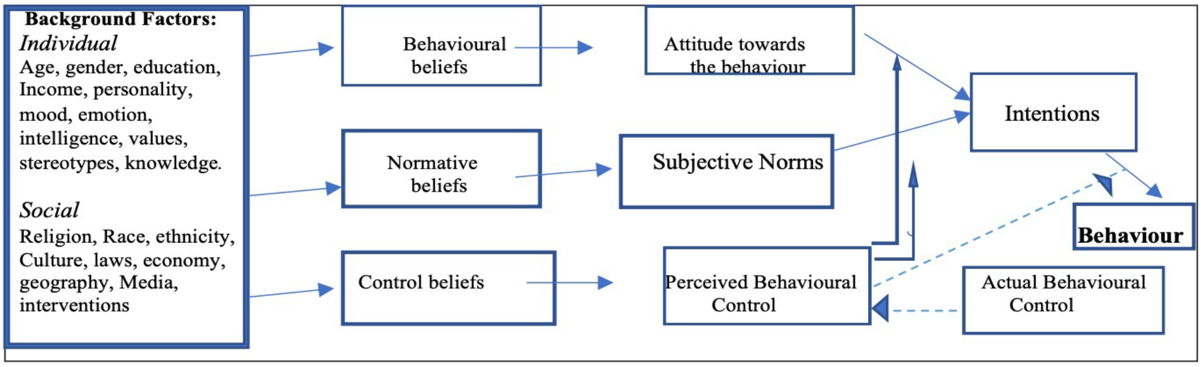
The antecedents' effect supported the use of the TPB to explain the final behavior. Several other studies used the TPB to study banking behavior such as Aziz and Afaq (2018), Yadav et al. (2015), Chai and Dibb (2014) , Çoşkun and Dalziel (2020), Deenanath et al. (2019), Tucker et al. (2019), Bapat's (2019), Loibl et al. (2021), Ibrahim and Arshad (2017), Ambad and Damit (2016), Flores and Vieira (2014), as well as Bashir and Madhavaiah's (2014).
According to the TPB, human behavior is influenced by three types of beliefs: behavioral, normative, and control beliefs. A 'Belief' according to Schwitzgebel, (2019) is a "state of mind" wherein one person places trust or confidence in others. These beliefs produce the core, attitude, subjective norms, and perceived behavioral control that drive individuals' financial behavior in the form of level of engagement in banking relationships. Attitude towards the behavior is the degree to which an individual has a favorable or unfavorable evaluation of the behavior concerned.

"Subjective norms" refer to the perceived social pressure to perform or not perform a behavior. It is assumed that subjective norms are determined by a set of normative beliefs concerning the expectations of important references or close individuals such as family, friends, co-workers, supervisors, or doctors. Normative beliefs, together with an individual's motivations, determine the subjective norms. The construct of "perceived behavioral control" refers to people's perception of the ease or difficulty of performing the behavior of interest; the perception of behavioral control is an impact of intentions and actions (Ajzen 1988 & 1991).
The TPB does not specify where these beliefs originated from but presents several possible background factors that include individual and social factors which have proven to impact the individual's beliefs and attitudes (Ajzen 1985). The background factors may influence the beliefs people hold, some of these factors are of a personal nature such as personality and broad life values; demographic variables such as education, age, gender, and income; and exposure to media and other sources of information.

This research will follow a path to test some background factors, taking into consideration that some factors such as age, income, gender, culture, and economy cannot be changed or influenced but will assist in confirming the strength or weakness of a relationship. Other factors, however, such as knowledge, education, financial literacy, and FinTech can be transformed, thus determining the relationship between factors before designing effective intervention methods which lead to the necessary behavioral change. The research will pave the way to clarify the kind of intervention needed to improve efficiency. In addition to the above independent individual and social factors, the research adds other related factors that are believed to have an impact on financial behavior: 'Trust' and 'Economic Knowledge'. These will be justified in the upcoming analysis.

Research Methodology

As this research is theory driven, a deductive approach to theory development was followed subject to rigorous testing. This research used the lens of the TPB (Ajzen, 2019) to understand the changes in human social behavior to be able to predict it. The TPB assumes a social reality and provides a basis of explanation indicating causal relationships. Several hypotheses were developed and then the data collected were analyzed using a quantitative approach.



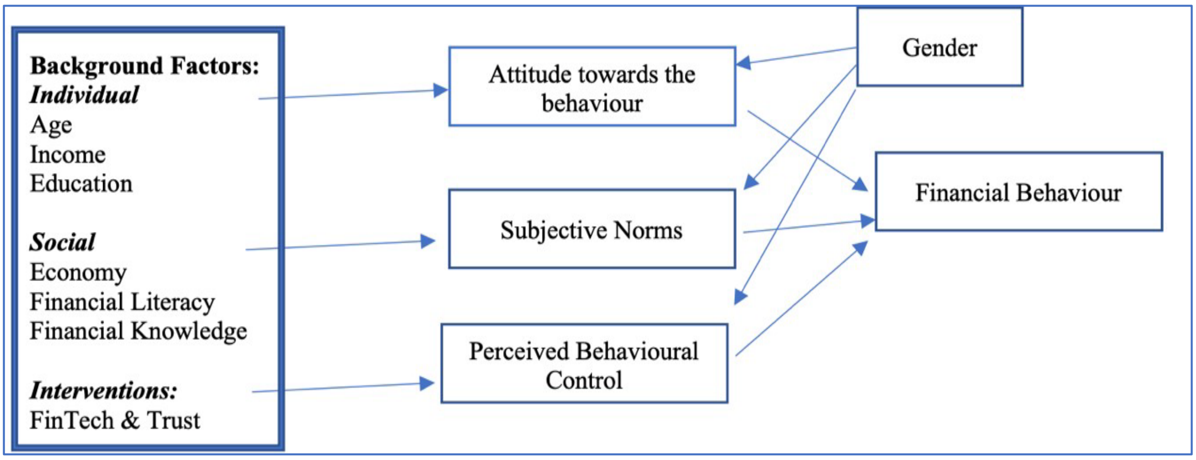
Model of the TPB (Ajzen, 2019)

The research adopted the positivism and post-positivism philosophical assumptions on social sciences which usually lead to the development of models that can predict human behavior. The methodology was the "Deductive Explanatory Methodology", which is the most common process in social sciences that tends to justify what is happening by using hypotheses to explain relationships among variables. Results determine relationships between factors thus enabling the design of effective interventions that would lead to the needed behavioral change.

The strategy for data collection consisted in a survey administered as a questionnaire and used as the instrument. The questionnaire that included twenty-nine questions, was prepared in both English and Arabic and was inspired by previous high ranked related studies in literature. The questionnaire was structured, standardized, tested, and administered to allow respondents to select the most appropriate option to reflect factors being studied. The research study investigated a non-probability sample of five hundred and forty-two (542) individuals who successfully completed all questions, to obtain a broad view of the individual and social factors that influence the level of engagement of individuals in a banking relationship in Jordan. The target population included Jordanians living in the eight largest cities of Jordan. Data was collected mostly electronically and in certain cases manually, depending on the location and electronic reach of some members within the target population.

The purpose of this research is to understand and observe the effect of the independent variables on the mediating/core variables then relate and propose new ideas and interventions that affect the dependent variable which is the financial behavior towards the level of engagement in a banking relationship.

The conceptual model of the TPB used for this research is highlighted in the figure below underscoring the independent factors that were selected from the TPB (age, education, income, economy, knowledge) in addition to the three factors that were added (trust, financial literacy and Fintech). Three mediating / core factors (attitude, subjective norms, and perceived behavioral control) in relation to the dependent factors being the financial behavior which reflect the level of engagement in a banking relationship. Gender was presented as a moderating variable defined by Allen, M. (2017) as variables that can strengthen, diminish, deny, or transform the relationship between independent and dependent variables. Sometimes moderating variables can change the direction of the relationship or help explain the links between the independent and dependent variables. Several hypotheses were presented and investigated to explore relationships and significance using the PLS SEM.

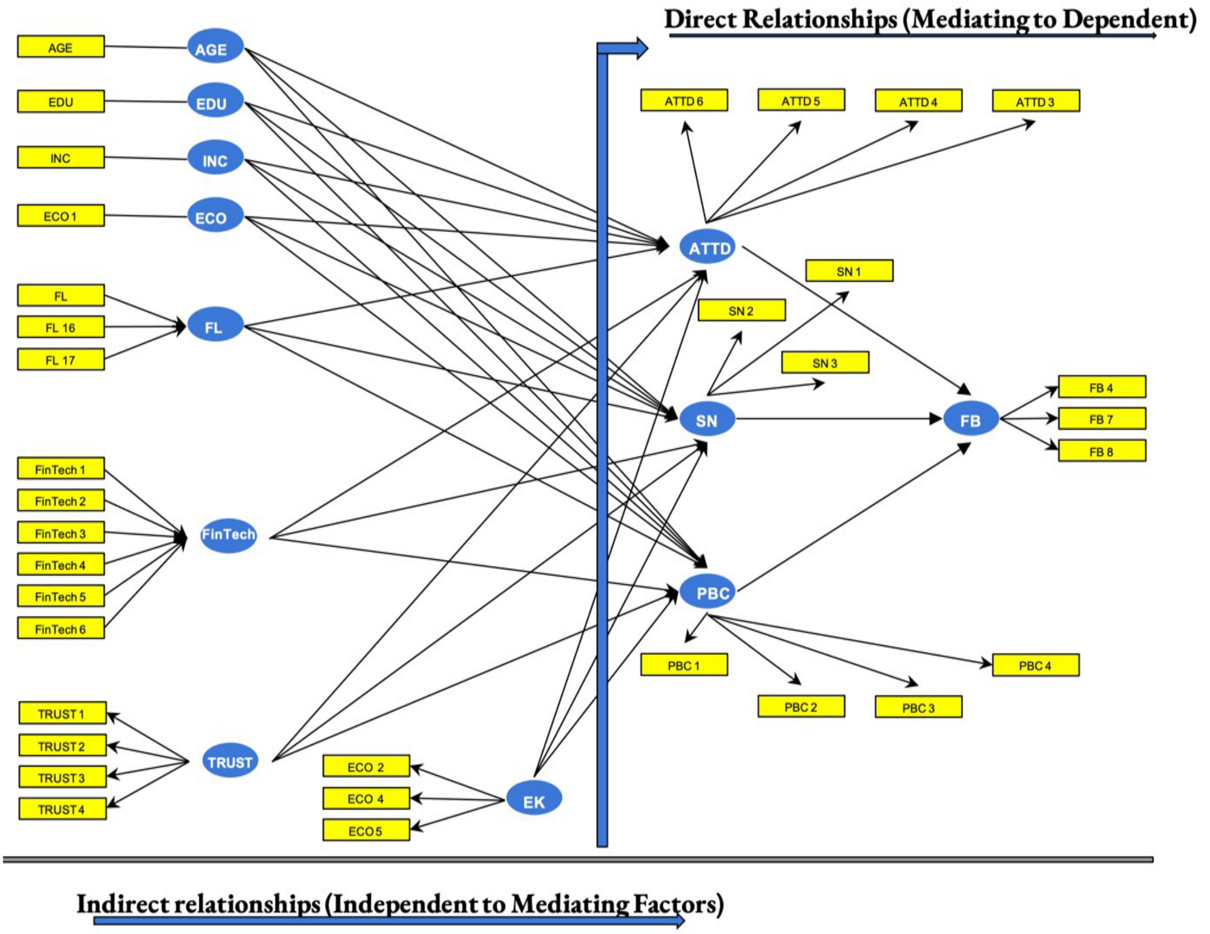


Using PLS SEM

The study employed a Partial Least Squares Structural Equation Modelling method, referred to as PLS SEM path modelling which is a popular method for estimating complex path models with latent variables and their relationships. The main goal of SEM is "statistical methodology that takes a confirmatory i.e. hypothesis-testing approach to the analysis of a structural theory bearing on some phenomenon" (Byrne, 2013, p. 3). When applying SEM, it is important to highlight the difference between the ***measurement model*** (outer model) and the ***structural model*** (inner model), which present the relationship between latent constructs known as factors and their indicators at the outer model, whereas relationships among latent constructs with each other are presented at the inner model (Henseler et al., 2009; Jarvis et al., 2003).

The PLS SEM analysis approach explains the relationships among multiple variables using a series of multiple regression equations, whereby causal relationships between constructs are represented by multiple regressions. This method is used for investigating cause effect interactions between constructs and variables and is suitable for both theory building and testing. The PLS-SEM technique is widely used in business research and offers the researcher a considerable flexibility in terms of model specifications and data. It is considered to be an adequate technique for both theory building and testing (Hult et al., 2009 and Hair et al., 2011). The principal step of SEM is the establishment of a path model which is a diagram that displays hypotheses and variable relationships to be estimated (Bollen 2002). A path model displays "constructs" also referred to as "latent variables", which represent conceptual variables that the researcher has defined in the theoretical model. It is important to determine the nature of the latent variables or constructs i.e. reflective vs. formative. Constructs appear in circles linked via single-headed arrows that represent predictive relationships to the "indicators" that are also names or "manifest variables or items" that appears in rectangles and represent the raw data collected, whether through direct measurement or observation.

In this research, as highlighted in the figure below developed by the PLS SEM, the constructs that appeared as latent variables were the independent variables: Age (AGE), Income (INC), Education (EDU), Economy (ECO), Economic Knowledge (EK), Financial literacy (FL), Financial Technology (FinTech), and Trust (TRUST). Each construct was linked to indicators that measured these constructs, represented by answers from the survey questions measuring that construct. The remaining constructs appearing as latent variables in the middle section of the model included Attitude (ATTD), Social Norms (SN), Perceived Behavioral Control (PBC), and then Financial Behavior (FB), a dependent latent variable which appears to the right of the model.



The results of conducting the PLS SEM tests to assess the structural model and investigate the proposed hypotheses are summarized in the table below indicating relationship strength, direction, and impact.

Hypotheses/Relationships	**Original Sample (O): Path (sign ±) Coefficients**	**(Significance)* P Values < 0.05**	****R^2**	**Supported (Yes/No) Description**
ATTD -> FB	0.120	0.024	0.326	Positive, significant & substantial.
AGE -> ATTD	0.129	0.001	0.326	Positive, significant & substantial.
AGE -> PBC	-0.004	0.915	0.492	Nonsignificant
AGE -> SN	-0.024	0.583	0.528	Nonsignificant.
EK -> ATTD	0.300	0.000	0.326	Positive, significant & substantial.
EK -> PBC	0.090	0.039	0.492	Positive, significant & substantial.

EK -> SN	0.131	0.014	0.217	Positive, significant & moderate.
ECO -> ATTD	0.057	0.143	0.326	Nonsignificant
ECO -> PBC	0.018	0.629	0.492	Nonsignificant
ECO -> SN	0.120	0.007	0.217	Positive, significant & moderate.
EDU -> ATTD	-0.060	0.177	0.326	Nonsignificant
EDU -> PBC	-0.011	0.740	0.492	Nonsignificant
EDU-> SN	0.031	0.543	0.217	Nonsignificant
FL -> ATTD	0.042	0.357	0.326	Nonsignificant
FL -> PBC	0.153	0.000	0.492	Positive, significant & substantial.
FL -> SN	0.030	0.531	0.217	Nonsignificant
FinTech -> ATTD	0.194	0.001	0.326	Positive, significant & substantial.
FinTech -> PBC	0.270	0.000	0.492	Positive, significant & substantial.
FinTech -> SN	0.217	0.000	0.217	Positive, significant & moderate.
INC -> ATTD	-0.078	0.075	0.326	Nonsignificant
INC -> PBC	0.017	0.693	0.492	Nonsignificant
INC -> SN	-0.112	0.033	0.217	Negative, significant & moderate.
PBC -> FB	0.592	0.000	0.528	Positive, significant & substantial.
SN -> FB	0.133	0.000	0.528	Positive, significant & substantial.
TRUST-> ATTD	0.184	0.003	0.326	Positive, significant & substantial.
TRUST -> PBC	0.363	0.000	0.492	Positive, significant & substantial.
TRUST -> SN	0.163	0.009	0.217	Positive, significant & moderate

***P Values < 0.05 considered significant **R^2 values of 0.26, 0.13 and 0.02 can be considered substantial, moderate, and weak.**

Findings & Discussion

Five hundred forty-two (542) individuals successfully completed the full questionnaire, and their responses were analyzed. The gender participation was 58% women versus 42% men. Of total participants, 58% were between the age of 40-59 years, 65% were private business employees, business owners or self-employed and 85% of the participants hold both a graduate and post graduate degrees. Most participants live in the capital Amman which is the main business and financial hub and 55% of all participants had been exposed directly or indirectly to economics and finance studies or courses. 31.37% of participants earn JD 1001-JD 2500 (USD 1400-3500) monthly, which is considered high income. 38.5% stated that they use the services extremely often (almost daily), and 36.7% use the banking services very often (weekly).

The findings confirmed that as per the main theory applied in this research; the TPB revealed and confirmed that ATTD, PBC, and SN play positive, significant, and substantial roles in the financial behavior of individuals as indicated by the level of engagement in a banking relationship in Jordan.

The dominant core factor to influence the level of engagement in a banking relationship is PBC, which was proved and influenced by individuals' independent factors EK, TRUST, FL, and FinTech. The findings indicated that most respondents lacked confidence in their ability to choose financial investment products and mostly chose to invest in real estate; revealing a need to provide more information about products and emphasize the need for increased involvement by the financial service providers.

Furthermore, this research has verified the important role of financial education or financial literacy (FL) in increasing the level of engagements. A strong financial base would lead to a higher level of engagement, which would improve banking relationships and performance, thus ensuring the survival, sustainability, and a better financial inclusion plan thereafter. As for the control factor being gender, the results showed some differences between the two groups (Men vs. Women). A significant difference in relationship was found between women's SN and PBC in terms of financial behavior. No significant evidence was found of a link between women's attitude and financial behavior, but there was significant evidence in the men's results.

Analyzing the findings and the results using PLS-SEM to determine the factors that affect the financial behavior of individuals indicated by the level of engagement in a banking relationship in Jordan demonstrated the following: First, the TPB revealed and confirmed that ATTD, PBC, and SN play positive, significant, and substantial roles in the financial behavior of individuals. Observing the effect of the three core factors on the dependent variable (FB), the results illustrate that PBC has the strongest impact on FB, PBC ($\beta=0.592$, $p<0.05$), followed by SN ($\beta=0.133$, $p<0.05$), and the least effect was attributed to ATTD ($\beta=0.12$, $p<0.05$).

Second, the effect of the independent variables on the mediating variables were determined as follows. TRUST has the strongest positive impact on PBC ($\beta=0.363$, $p<0.05$), followed by EK on ATTD ($\beta=0.30$, $p<0.05$), then FinTech on PBC ($\beta=0.27$, $p<0.05$), FinTech on SN ($\beta=0.217$, $p<0.05$), FinTech on ATTD ($\beta=0.194$, $p<0.05$). Trust on ATTD ($\beta=0.184$, $p<0.05$) and TRUST on SN ($\beta=0.163$, $p<0.05$). The importance of financial literacy was related to the perceived behavioral control reflecting an impact of FL on PBC, ($\beta=0.153$, $p<0.05$). The only independent variables with negative significance and a moderate effect on the mediating variables was INC on SN ($\beta=-0.112$, $p<0.05$).

As for the control factor being Gender, the results showed some differences between the two groups (Men vs. Women). A significant difference in relationship was found between women's SN and PBC in terms of financial behavior. No significant evidence was found between women's attitude and financial behavior whereas there was significant evidence in the men's results. The significant perception differences were between (ATTD →FB) and (INC→SN) which were considered important and meaningful for Men but not for Women. EK is strongest independent factor for Women and affects their three core factors (ATTD, PBC, and SN) whereby EK only affects Men's ATTD toward the FB. ECO and INC, findings reflected significant effect for Men only on their SN or social surrounding beliefs. TRUST was more significant to Men as it affects both their ATTD and PBC. Women's TRUST significance was related to their PBC. FinTech and FL were equally important to both Men and Women.

The validity of these findings and the need for greater deliberation is underlined by the fact that other publications (The Report: Jordan 2018: Country Profile, 2022), largely highlighted similar considerations, thus emphasizing the need for further improvements regarding accessing the unbanked population and keeping up with the global developing Fintech industry. Unless these issues are addressed, the engagement levels in banking relationships would not improve. The research findings strongly suggest that the banking sector in Jordan, guided by the CBJ will have to place more emphasis on educating and developing individuals to improve the level of engagement in their banking relationships and provide other services to improve the implementation of the financial inclusion plan. Thus, the strategic plans of banks to perform effectively and sustain performance should encourage the use of the available educational and training platforms and be committed to engaging more with government and non-government bodies to strengthen the drivers for banking relationship initiation and higher engagement.

These research findings are a reminder to banks that their marketing campaigns that offer new services at the far end of the relationship are not enough to improve the level of engagement. It is also a call to policymakers to investigate and offer explorative activities to enlighten individuals with up to date financial and economic knowledge that would boost their confidence and lead to stronger drivers to engage more in their banking relationships. Such activities start at school and continue through attractive online or in-person training programs.

Conclusions

To improve the level of engagement in a banking relationship in Jordan, there is a need to boost the individuals' PBC and equip them with stronger means of control to perform and use the different banking services, thus improving the level of engagement in their banking relationship which is the intended financial behavior. This can be done through strengthening financial literacy at an early age which will improve interest in understanding the financial system as well as encourage improved knowledge of economics. Such antecedents would enhance trust in the financial system and improve engagement levels and use of further financial services.

This research provided findings that may be used to introduce new information that would lead to changes in individuals' beliefs. These changes are expected to be more effective if related to their economic knowledge (EK), financial literacy (FL), financial technology (FinTech) or (TRUST). The significant relationships between these independent variables and the strongest core variable PBC are expected to affect the financial behavior of individuals.

The following details highlight the effect of the independent variables on the mediating variables as concluded from the research analysis:

- AGE was found to play positive, significant, and substantial role on the individual's ATTD, with no significant effect on the individual's PBC or SN beliefs;
- EDU has no effect on the ATTD, PBC nor does it affect an individual's SN beliefs;
- INC has no effect on the ATTD nor on PBC but showed a moderate negative effect on the individuals SN beliefs. ECO on individual's ATTD and SN was insignificant. However ECO showed a moderate positive effect on the individuals PBC beliefs;
- FL has no effect on the individual's ATTD nor on SN beliefs, but FL showed significant positive and substantial effect on the individual's PBC;
- FinTech has significant, positive, and substantially affect on ATTD, SN & PBC;
- EK significantly, positively, and substantially affect an individual's ATTD and PBC and moderately affects the individuals SN;

- TRUST has positive substantial effect on individuals' ATTD and PBC, and a positive moderate effect was demonstrated on an individuals' SN;
- A significant difference in relationship was found between female SN and PBC in terms of financial behavior.

The following points outline how the findings of this research contribute to the literature on the financial behavior of individuals. First, this research provided empirical support and an enhanced picture of the determinants or the antecedents and the driving forces of individuals' financial behavior. Second, this research demonstrated that TPB predicts engagement in financial behavior and suggested the ideal way to produce a change in behavior is by introducing new information that would lead to the change in shaping an individual's beliefs. Since behaviors often revert to what they were prior to the intervention, it must be ensured that individuals' new beliefs accurately reflect reality, only then is it fair to expect that the effect of the intervention will persist over time. Often intervention is ineffective unless the individuals have the potential to carry out their newly formed intentions over a long period which will ensure the translation of intentions into behavior. This research recommends interventions at an early age through FL programs at school in addition to continuous follow up to develop and improve knowledge through training and awareness campaigns.

From a practical perspective, this research has several important implications for both banks and policymakers. Investigating the independent factors influencing the level of engagement of individuals in a banking relationship could indicate the relevant type of resources to invest in at each stage of the behavioral process. It was revealed that banks should be aware and continuously work on updating the individuals in terms of economic and financial knowledge (EK and FL), which is particularly important at the initiation stage. Then, providing them with FinTech services that would boost their TRUST in themselves and in the banking system will lead to a higher level of engagement in banking relationships.

Recommendations

The following recommendations are suggested to further enhance the current developments and perhaps suggest new initiatives and interventions for banks, regulators, government, and non-government entities to consider.

First: Financial Literacy (FL) should be a priority in the Jordanian educational system. Principles of business, economics, and finance to be introduced at an early stage in school curricula. Receiving financial education at an early age would prepare a generation to manage its small finances, thus enhancing individual's ATTD, PBC, and readiness to manage larger finances and more complex situations in their practical life after school.

Second: More financial training and awareness campaigns should be launched online and on ground at all levels. For example, banks are expected to spread financial awareness about their services through handy publications that are easy to read and to understand, explaining how to use a service and what the benefit is to the customer and to the bank. This would ensure that customers are well informed about services, trust their banks more and are ready to use such services with confidence, which will enhance their level of engagement in their banking relationship.

Third: Similarly to point Two, financial training and awareness campaigns need to be launched online and on ground with a special focus on women in bank account engagement. Banks should provide these campaigns along with handy publications to promote services which cater to women's needs and encourage them to maintain their own banking relationships and accounts. Such campaigns would enhance their EK and TRUST, thus improving their engagement in their banking relationships. The awareness campaigns, whether through publications, direct calls, or face-to-face meetings with banking experts, would be considered interventions that would improve women's EK along with TRUST which would affect their PBC leading to higher levels of engagement in their banking relationships. Bank customer service roles need to expand further to include day-to-day awareness and educational promotions to customers on ground, on the phone, and online. Customer service needs to act as the well of knowledge that keeps customers aware and up-to-date with latest developments.

Fourth: Banks should invest more in training and research departments in an effort to provide new up-to-date services to existing customers, attract new young customers and enlarge the female customer base. The research findings asserted that FinTech can have a positive, significant, and substantial effect on the three core factors ATTD, SN and PBC that determine the financial behavior of individuals, FB. Thus, banks should continuously provide and upgrade their FinTech services to improve the level of engagement in banking relationships at all levels. This can be done through more investment in their training and research departments or through supporting FinTech companies.

Fifth: Regulators should encourage youth, including school students, to open accounts and issue them debit or prepaid cards with parent supervision. Maintaining a bank account and managing one's own expenses at an early age would improve individuals' PBC, build trust, and enhance money planning and investment awareness, thus encouraging entrepreneurship and responsibility. This recommendation would play a crucial role in the implementation of the financial inclusion plan in the long run.

Sixth: Regulators and banks should use media (social media, TV, and radio) to promote services including awareness campaigns to promote savings and investments. Social media is considered a strong tool to spread awareness and encourage peer action. These campaigns may also be delivered through sponsoring of social cultural events to spread financial awareness.

Limitations and Future Research Suggestions

Although this research has presented important implications for the Jordanian market, it is necessary to acknowledge its limitations.

First: The sample size of five hundred and forty-two (542) participants proved to be sufficient to conduct a robust statistical analysis. However, it was not fully representative of the Jordanian population, primarily concentrating on individuals from the capital Amman and its surroundings. The data collection process took four months, from July to October 2021, an extraordinary period when the world was opening up again after the COVID19 pandemic, implying limitations in terms of reach and communication.

Second: This research could not measure the impact of the latest developments in the education system on individuals, to assess the effect of FL programs that had already started on individuals' financial knowledge and behavior. A longitudinal study would bring enhanced insights into the indirect effects of the FL programs and could hence be a more accurate way to evaluate the effectiveness of such programs.

Third: The relationships examined represent a snapshot in time. Although it is likely that the conditions under which the data were collected will remain essentially the same, there are no guarantees that this will be the case. Future longitudinal studies might assess further engagement dimensions and outcomes in the long term.

Fourth: The comprehensive approach adopted in this study attempted to include the most important resource factors influencing individual financial behavior. However, some other individual factors such as personality, mood, values and other social factors such as religion, culture, law, and media could be important predictors of financial behavior, yet may have been neglected by the literature, and were covered by this research. Future research could explore these potentially influential factors.

Fifth: The available research literature in the "engagement in banking relationships" is very limited, despite its importance. It has been highlighted as an essential behavior to retain and recapture the growth in the banking sector, requiring more research to capitalize on customer engagement behavior for the benefit and growth of the banking sector.

Finally, this research presented praxis by analyzing and studying the phenomena of engagement in banking relationships in Jordan through the lens of the TPB and succeeded in bridging the gap between this theory and the current practice within the banking sector in Jordan. This quantitative research has provided evidence and answered the "what" regarding the financial behavior of individuals in Jordan and the impact of individual and social factors. Further qualitative research is recommended to answer the "why" and cover what individuals have in mind and why they behave the way they do. It is suggested to conduct more studies in other related economies within the MENA region. More studies and investigating more factors would provide further critical implications for both theory and practice in the educational and banking sectors.

References

Agnes Csiszarik-Kocsir and János Varga, (2017). 'The Relationship between the bank products and the financial knowledge according to the results of a questionnaire survey,' *Economy & Business Journal*, **11**, (1), 367-377

Ajzen, I. (1985). 'From intentions to actions: A theory of planned behavior,' *Action Control*, pp. 11– 39. Retrieved from: https://doi.org/10.1007/978-3-642-69746-3_2

Ajzen, I. (1988). Attitudes, personality, and behavior. Chicago: Dorsey Pres

Ajzen, I. (1991). 'The theory of planned behavior,' *Organizational Behavior and Human Decision Processes*, 50(2), pp. 179–211. Retrieved from: https://doi.org/10.1016/0749-5978(91)90020-T

Ajzen, I. (2019). *Theory of Planned Behavior (TPB) with background factors*. Retrieved November 16, 2022, from: https://people.umass.edu/aizen/tpb.background.html

Ajzen, I. and Fishbein, M. (1972). 'Attitudes and normative beliefs as factors influencing behavioral intentions.,' *Journal of Personality and Social Psychology*, 21(1), pp. 1–9. Retrieved from: https://doi.org/10.1037/h0031930

Ajzen, I. (2002). 'Perceived behavioral control, self-efficacy, locus of control, and the theory of planned behavior,' *Journal of Applied Social Psychology*, 32(4), pp. 665–683. Retrieved from: https://doi.org/10.1111/j.1559-1816.2002.tb00236.x

Atkinson, A. and Messy, F. (2012). *Measuring Financial Literacy Results of the OECD / International Network on Financial Education (INFE) Pilot Study*, *OECD Library*. OECD working papers on Finance, insurance and private pensions, no. 15, OECD Publishing. - references - scientific research publishing. Retrieved October 30, 2022, from: https://www.scirp.org/(S(i43dyn45teexjx455qlt3d2q))/reference/ReferencesPapers.aspx?ReferenceID=2275403

Allen, M. (2017). *The sage encyclopedia of communication research methods*, *Amazon*. SAGE Publications, Inc. Retrieved October 23, 2022, from: https://www.amazon.com/SAGE-Encyclopedia- CommunicationResearch-Methods/dp/1483381439

Ambad, S.N. and Damit, D.H. (2016). 'Determinants of entrepreneurial intention among undergraduate students in Malaysia,' *Procedia Economics and Finance*, 37, pp. 108–114. Retrieved from: https://doi.org/10.1016/s2212-5671(16)30100-9

Andarsari, P.R. and Ningtyas, M.N. (2019). 'The role of Financial Literacy on financial behavior,' *JABE (Journal Of Accounting And Business Education)*, 4(1), p. 24. Retrieved from: https://doi.org/10.26675/jabe.v4i1.8524

Aziz, S. and Afaq, Z. (2018). 'Adoption of Islamic banking in Pakistan an empirical investigation,' *Cogent Business & Management*, 5(1), p. 1548050. Retrieved from: https://doi.org/10.1080/23311975.2018.1548050

Bapat, D. (2019). 'Exploring antecedents to financial management behavior for young adults,' *Journal of Financial Counseling and Planning*, 30(1), pp. 44–55. Retrieved from: https://connect.springerpub.com/content/sgrjfcp/30/1/44

Bashir, I. and Madhavaiah, C. (2014). 'Determinants of young consumers' intention to use internet banking services in India,' *Vision: The Journal of Business Perspective*, 18(3), pp. 153–163. Retrieved from: https://doi.org/10.1177/0972262914538369

Bencivenga, V. R., & Smith, B. D. (1991). Financial intermediation and endogenous growth. *The Review of Economic Studies*, 58(2), 195–209.

Bollen, K.A. (2002). 'Latent variables in psychology and the Social Sciences,' *Annual Review of Psychology*, 53(1), pp. 605–634. Retrieved from: https://doi.org/10.1146/annurev.psych.53.100901.135239

Byrne, B.M. and Byrne, B.M. (2013). 'Structural equation modeling with EQS.' Retrieved from: https://doi.org/10.4324/9780203726532

Chai, J.C. and Dibb, S. (2014). 'How consumer acculturation influences Interpersonal Trust,' *Journal of Marketing Management*, 30(1-2), pp. 60–89. Retrieved from: https://doi.org/10.1080/0267257x.2013.803140

Central Bank of Jordan (2022). *Spreading financial and banking literacy*, *Spreading Financial and Banking Literacy - The Central Bank of Jordan*. Central Bank of Jordan. Retrieved October 29, 2022, from: https://www.cbj.gov.jo/Pages/viewpage.aspx?pageID=202

Çoşkun, A. and Dalziel, N. (2020). 'Mediation effect of financial attitude on financial knowledge and financial behavior,' *International Journal of Research in Business and Social*

Science (2147- 4478), 9(2), pp. 01–08. Retrieved from: https://doi.org/10.20525/ijrbs.v9i2.647

Csiszárik-Kocsir, Á., 2017. Crisis and Financing–or the PracticalFinancing Decisions of Hungarian Small and Medium-sized Enterprises. *Polgári Szemle: Gazdasági És Társadalmi Folyóirat*, *13*(Spec.), pp.199-215.

Deenanath, V., Danes, S.M. and Jang, J. (2019). 'Purposive and unintentional family financial socialization, subjective financial knowledge, and financial behavior of high school students,' *Journal of Financial Counseling and Planning*, 30(1), pp. 83–96. Retrieved from: https://connect.springerpub.com/content/sgrjfcp/30/1/83

Demirgüç-Kunt, A., Klapper L., Singer D., Ansar S., and Hess J. (2018). 'Overview,' *The Global Findex Database 2017: Measuring Financial Inclusion and the Fintech Revolution*, pp. 1–14. Retrieved from: https://doi.org/10.1596/978-1-4648-1259-0_ov

Flores, S.A. and Vieira, K.M. (2014). 'Propensity toward indebtedness: An analysis using behavioral factors,' *Journal of Behavioral and Experimental Finance*, 3, pp. 1–10. Retrieved from: https://doi.org/10.1016/j.jbef.2014.05.001

Freeman, R.E. (1984). Strategic Management: A Stakeholder Approach, Pitman, Boston, MA.

Geva, B. (2001). 'Bank collections and payment transactions a comparative legal analysis.' Retrieved from: https://doi.org/10.1093/acprof:oso/9780198298533.001.0001

Hair, J.F., Ringle, C.M. and Sarstedt, M. (2011). 'PLS-SEM: Indeed a silver bullet,'*Journal of Marketing Theory and Practice*, 19(2), pp. 139–152. Retrieved from: https://www.tandfonline.com/doi/full/10.1080/10696679.2022.2056488

Hair, J.F., Sarstedt, M., Ringle, C., and Mena, J. (2011). 'An assessment of the use of partial least squares structural equation modeling in Marketing Research,' *Journal of the Academy of Marketing Science*, 40(3), pp. 414–433. Retrieved from: https://doi.org/10.1007/s11747-011-0261-6

Henseler, J., Ringle, C.M. and Sinkovics, R.R. (2009). 'The use of partial least squares path modeling in International Marketing,' *Advances in International Marketing*, pp. 277– 319. Retrieved from: https://doi.org/10.1108/s1474-7979(2009)0000020014

Hult, G.T., Neese, W.T. and Bashaw, R.E. (2009). 'Worldwide faculty perceptions of marketing journals: rankings, trends, comparisons, and segmentations.' *Global Edge Business Review*, 3, pp. 1– 23.

Ibrahim, Y. and Arshad, I. (2017). 'Examining the impact of product involvement, subjective norm and perceived behavioral control on investment intentions of individual investors in Pakistan,' *Investment Management and Financial Innovations*, 14(4), pp. 181–193. Retrieved from: https://doi.org/10.21511/imfi.14(4).2017.15

Jarvis, C.B., MacKenzie, S.B. and Podsakoff, P.M. (2003). "A critical review of construct indicators and measurement model misspecification in marketing and Consumer Research," *Journal of Consumer Research*, 30(2), pp. 199–218. Retrieved from: https://doi.org/10.1086/376806

Ji, J. and Wang, Y. (2014). 'Commercial Bank Efficiency Evaluation in consideration of the undesirable output and its link with stakeholders' relationship: An application of China's commercial banks,' *Mathematical Problems in Engineering*, 2014, pp. 1–7. Retrieved from: https://doi.org/10.1155/2014/949717

King, R.G. and Levine, R. (1993). 'Finance and growth: Schumpeter might be right,' *The Quarterly Journal of Economics*, 108(3), pp. 717–737. Retrieved from: https://doi.org/10.2307/2118406

Kosiba, J.P., Boateng, H., Okoe, A., Hinson, R. (2018). 'Trust and customer engagement in the banking sector in Ghana,' *The Service Industries Journal*, 40(13-14), pp. 960–973. Retrieved from: https://doi.org/10.1080/02642069.2018.1520219

LaMorte, W. (2022). *Behavioral change models*, *The Theory of Planned Behavior*. Boston University School of Public Health. Retrieved November 6, 2022, from: https://sphweb.bumc.bu.edu/otlt/MPH-Modules/SB/BehavioralChangeTheories/BehavioralChangeTheories3.html

Levine, R. (2005). 'Chapter 12 Finance and Growth: Theory and evidence,' *Handbook of Economic Growth*, pp. 865–934. Retrieved from: https://doi.org/10.1016/s1574-0684(05)01012-9

Loibl, C., Letkiewicz, J., McNair, S., Summers, B. and Bruine de Bruin, W., (2021). 'On the association of debt attitudes with socioeconomic characteristics and financial behaviors,' *Journal of Consumer Affairs*, 55(3), pp. 939–966. Retrieved from: https://doi.org/10.1111/joca.12384

McDonald, L.M. and Rundle-Thiele, S. (2008). Corporate Social Responsibility and bank customer satisfaction,' *International Journal of Bank Marketing*, 26(3), pp. 170–182. Retrieved from: https://doi.org/10.1108/02652320810864643

Mittal, V., Anderson, E, Sayrak A., Tadikamalla P. (2005). 'Dual emphasis and the long-term financial impact of customer satisfaction,' *Marketing Science*, 24(4), pp. 544–555. Retrieved from: https://doi.org/10.1287/mksc.1050.0142

Mthembu, M. (2014). 'Marriage of convenience: Bank-Customer relationship in the age of the internet: a South African perspective.' *Journal of International Commercial Law and Technology*, 9(1), 14-23.

National Financial Inclusion Strategy NFIS (2018 – 2020). Central Bank of Jordan. Retrieved October 29, 2022, from: https://financialinclusionjo.com/national-financial-inclusion-strategy-2018-2020/

Odedokun, M.O. (1998). 'Financial intermediation and economic growth in developing countries,' *Journal of Economic Studies*, 25(3), pp. 203–224. Retrieved from: https://doi.org/10.1108/01443589810215351

Oxford Business Group (2018). *The report: Jordan 2018: Country profile*. Bloomberg Terminal Research. Retrieved October 29, 2022, from: https://oxfordbusinessgroup.com/reports/jordan/2018-report

Özmete, E. (2015). ‘Measuring the poverty of elderly people with needs analysis in Turkey,’ *Handbook of Research on Behavioral Finance and Investment Strategies*, pp. 127–146. Retrieved from: https://doi.org/10.4018/978-1-4666-7484-4.ch008

Petersen, M., & Rajan, R. (1994). ‘The Benefits of Lending Relationships: Evidence from Small Business Data.’ *The Journal of Finance, 49(1), 3-37.* Retrieved from: https://onlinelibrary.wiley.com/doi/10.1111/j.1540-6261.1994.tb04418.x

Sahoo, D. and S. Pillai, S. (2017). ‘Role of mobile banking servicescape on customer attitude and engagement,’ *International Journal of Bank Marketing*, 35(7), pp. 1115–1132. Retrieved from: https://doi.org/10.1108/ijbm-09-2015-0144

Sashi, C.M. (2012). ‘Customer engagement, buyer-seller relationships, and Social Media,’ *Management Decision*, 50(2), pp. 253–272. Retrieved from: https://doi.org/10.1108/00251741211203551

Shamim, F. (2007). ‘The ICT environment, financial sector and economic growth: A cross-country analysis,’ *Journal of Economic Studies*, 34(4), pp. 352–370. Retrieved from: https://doi.org/10.1108/01443580710817452

Schwitzgebel, E. (2019). *Belief*, *Stanford Encyclopedia of Philosophy*. Stanford University. Retrieved October 27, 2022, from: https://plato.stanford.edu/entries/belief/

Tezel, Z. (2015). ‘Financial Education for Children and youth,’ *Handbook of Research on Behavioral Finance and Investment Strategies*, pp. 69–92. doi: 10.4018/978-1-4666-7484-4.ch005

Tucker, M., Jubb, C. and Yap, C.J. (2019). ‘The theory of planned behaviour and student banking in Australia,’ *International Journal of Bank Marketing*, 38(1), pp. 113–137. Retrieved from: https://doi.org/10.1108/ijbm-11-2018-0324

Yadav, R., Chauhan, V. and Pathak, G.S. (2015). ‘Intention to adopt internet banking in an emerging economy: A perspective of Indian youth,’ *International Journal of Bank Marketing*, 33(4), pp. 530– 544. Retrieved from: https://www.emerald.com/insight/content/doi/10.1108/IJBM-06-2014-0075/full/htmlXu, Z. (2000). ‘Financial Development, investment, and economic growth,’ *Economic Inquiry*, 38(2), pp. 331–344. Retrieved from: https://doi.org/10.1111/j.1465-7295.2000.tb00021.x

Xu, L. and Zia, B. (2012). ‘Financial literacy around the world: An overview of the evidence with practical suggestions for the way forward,’ *Policy Research Working Papers* [Preprint]. Retrieved from: https://doi.org/10.1596/1813-9450-6107