

# The Power of Knowledge in Shaping Retirement Planning in Jordan: Trust and Advice as Key Factors

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## ABSTRACT

The purpose of this study was to identify the association between financial advice, trust in financial advisors, financial knowledge, and retirement planning behavior and to determine the role of financial knowledge on the association between financial advice and trust in financial advisors as well as between trust in financial advisors and retirement planning behavior. A quantitative research design was used for the study and data were collected from 412 working Jordanian adults aged 25-60 through the use of an online questionnaire. The results demonstrate that financial advice and trust to financial advisors both directly and indirectly through facilitating financial knowledge impacts retirement planning behaviour positively. The aforementioned findings lend more insight to the literature while confirming the complexity of such relationships in the context of Jordan and offering practical implications for financial service providers, policymakers, and individuals. Nonetheless, its strengths include the use of self-reported data and lack of a longitudinal design. The main contribution of this study is its theoretical and empirical contextualization of the application of the TTM to the study of the impact of financial advice on trust, financial knowledge, and retirement planning behaviour in the Middle East.

**Keywords:** Financial Advice, Financial Knowledge, Retirement Planning Behaviour, Trust in Financial Advisors.

## INTRODUCTION

In past years, retirement planning has emerged as a critical issue for individuals and governments alike. OECD (2019) has stated that the combination of population aging and the rising expectation of life has created great pressure on pension systems in the world. The situation in Jordan is not as different from other countries in the world and as it faces the challenge of ensuring that its population develops effective retirement planning tactics. The World Bank reports that Jordan's old-age dependency ratio, which represents the ratio of elderly people as a portion of the population capable of labor, will increase from 7% in 2022 to 16% in 2050 (World Bank, 2021). from 4 percent in 2020 up to 16 percent. 7% by 2050. This is especially so if one considers that Jordan is rapidly moving towards being an aged society. Even though there are significant factors that are conducive for retirement planning; however, there are various reasons why people in Jordan are not prepared for their retirement. Based on the research conducted by the Central Bank of Jordan in 2018, 22% of Jordanian adults have a retirement account, and 11% of those polled have a written retirement plan. Second, the study also revealed that 54% of Jordanians depend on their children/family members for financial support during retirement/old age. With the figures in view, it is crucial to discuss issues of retirement planning behavior in Jordan in order to understand how retirement planning can be addressed in an effective way. Trust is one of the other factors which are considered as potential predictors of retirement planning behavior as well as the adoption of financial advice. Several studies prove that clients who use advisors for their wealth management are more inclined to plan for their retirement (Marsden et al., 2011; Salter et al., 2014). But this enthusiasm in the use of financial advice for retirement planning may exist depending on the level of trust that investors may have in the advisor. It has long been acknowledged that trust is a vital factor in the client-advisor relationship in determining whether individuals will adhere to the given advice

(Lachance & Tang, 2012). Other researchers have also sought to study the influence of financial advice and trust on retirement behavior but in the Jordanian context. Most of the limited literature on this subject has centred on developed countries like the US and Australia. g. While many countries have tried to engage in this kind of innovation (Gerrans & Hershey, 2017; Marsden et al., 2011), this practice is not popular in developing countries such as Jordan. As it was stated above, retirement planning in Jordan is considered in its unique sociocultural, economic, and institutional context. That is why it is important to check the impact of financial advice and trust in this specific situation. In addition, there is a lack of evidence on the indirect effects of knowledge on the relationship between financial advice, trust, and retirement planning behaviour in the Jordanian context. Financial literacy is the ability of an individual to comprehend financial concepts and participate in the financial market, and research has demonstrated that financial knowledge has a positive impact on retirement preparation (Lusardi & Mitchell, 2011). Thus, little is known concerning the role that trust in financial advisors and the knowledge that they provide in relation to retirement planning behaviour in Jordan. The objective of this study is to identify the effect of financial advice and trust on retirement planning behavioural intentions in Jordan and their relationship with financial knowledge as a mediator. The following are a few ways in which this research objective will contribute to knowledge of retirement planning behaviour: Secondly, the study intends to offer empirical evidence about the role that financial advice and trust play to retirement planning decisions within the Jordanian context. This specific insight is important for development of targeted interventions and policies to improve the country's retirement planning practice. Second, the current study uses mediating variable approach to investigate the mechanisms through which financial advice and trust influence retirement planning behavior in terms of financial knowledge. It is important to understand these mechanisms so that we can come up with better educational policies and interventions that target educating people about finances in order to improve financial literacy for better retirement planning (AlQudah et al., 2023). Thirdly, the chosen method for the study is the PLS-SEM approach, which is especially helpful for analyzing relationships based on latent variables. Employing this complex statistical approach enables some increased insight into how trust and knowledge shape the relationship between financial advice and retirement behavior. Further, the conclusions drawn from this study can be useful as recommendations for financial advisors, lawmakers, and institutions in Jordan. The study can assist the financial advisor in the improvement of his performance by determining the core factors that drive the retirement planning behavior of the purchaser. Based on the information analyzed in this research, the policymakers can create specific policies and regulations that can allow to enhance trust in the financial advisors and the financial knowledge of the population. Another group of individuals that may benefit from the study's results are the educational establishments as they can integrate the results into their learning and training programs that prepare future financial market employees.

## **Literature Review and Theoretical Foundation**

### **Transtheoretical Model of Behavior Change (TTM) Theory**

Transtheoretical Model of Behavior Change (TTM) is a conceptual model by Prochaska and DiClemente (1983) used to explain the stages of behavior change as a person experiences transition in behavior like retirement planning. By investigating the effect of the financial advice and trust in financial advisors on the retirement planning behavior in Jordan through the use of the TTM model, we can deduce how these factors can potentially affect the behavior change process and the mediating role from the financial knowledge perspective. In the precontemplation stage it may also be that the individuals in Jordan are not aware of the importance of retirement saving or do not consider it relevant at present. Financial advisors can be very useful by moving from precontemplation stage to contemplation stage by providing information and increasing people's awareness regarding retirement planning (Gutierrez & Hershey, 2014). Relevant trust at this stage is important as people tend to rely on the information that comes from the financial advisors, they deem credible and trustworthy (Lachance & Tang, 2012; Albdour et al., 2024). The transition from pre contemplation to contemplation and preparation is characterized by people's intention to adopt the concept of retirement planning and getting information and support. Financial advisors may assist this endeavor by providing advice to clients, encouraging goal setting, and preparing goal-oriented plans for individuals (Marsden et al., 2011). Trust is very important as often people follow the recommendations of advisors they trust (Salter et al., 2014). Financial literacy also gradually starts at these stages as individuals try to comprehend some of the aspects and approaches for planning their retirement (Lusardi & Mitchell, 2011). The action stage of retirement planning behaviors takes place in Jordan where people are involved in retirement planning behaviors like retirement saving and investment in the suitable financial instruments and the retirement review. Financial knowledge as well as the trust in the financial advisors still play a very significant role in navigating people through this phase and offering them ongoing advice and reminders to ensure their success (Gerrans & Hershey, 2017). Financial knowledge proves more relevant with every passing day since people need to make savvier retirement planning choices (Lusardi & Mitchell, 2011). Fourth and lastly, in the maintenance stage, individuals strive at sustaining good retirement planning habits over long periods of time. Financial advisors may still have an important part to play in helping people, such as regularly reviewing progress and making adjustments when necessary, and communicating the benefits and

positive psychology to make people more motivated (Gutierrez & Hershey, 2014). The acceptability of advice from financial advisors still remains significant because people are more likely to obey the instructions of their trustworthy advisors (Lachance & Tang, 2012). Financial knowledge also plays a role in the sustainability of retirement planning behaviors, as those planning for retirement have to keep pace with developments in the financial world and adjust their strategies in response to changes in it (Lusardi & Mitchell, 2011). From the analysis of retirement planning behavior in Jordan based on the TTM, there emerges a picture which is evident in how financial advice, trust in financial advisors, and financial knowledge affects an individual's stage in behavior change. Both financial advice and trust in financial advisors are used to help advance individuals into the following stage and financial knowledge is the mediating factor responsible for assisting individuals with their decision-making ability and their ability to remain committed to their retirement planning behavior.

### **Retirement planning behavior in Jordan**

The retirement planning behaviour in Jordan has been the topic of growing interest in the recent years due to the high demand in the country to create the best retirement plans for the ageing society. Retirement planning is often viewed as extremely significant yet it is not highlighted among many Jordanians. Jordanian adults that participate in pension plans as reported by the Central Bank of Jordan (2018) include 22% having a retirement savings account and only 11% having a written retirement plan. Additionally, the study revealed that 56 percent of the Jordanians depend on their children or family members for retirement support. A number of variables have been described as possible predictors for retirement planning behaviour in Jordan. Financial knowledge or the ability of an individual to comprehend financial knowledge has also been identified as one of the predictors of retirement planning behavior (Al-Tamimi & Kalli, 2009). A survey by Al-Rahahleh et al. (2019) showed that only a third of adults in Jordan had a basic understanding of concepts such as interest rates, inflation, long-term investment, and diversification of risks. The authors use the case of Jordan to demonstrate that enhancement of financial knowledge may contribute to better retirement planning. Social-cultural factors also affect the retirement planning behaviour in Jordan. Alkhawaldeh, et al., (2023a) also note that perceived family pressure and social norms may shape individuals' retirement preparation. In Jordan there is a culture that expects a person to always put food on the table of his family and as a result the people of Jordan are not committed to retirement plans since it only concentrates on the present and not the future. It highlights that 62% of Jordanian adults expect to be supported financially during retirement by their children. The impact of trust also in financial advice and trust in financial advisors has been studied with regard to retirement planning behaviour in Jordan. Mustafa, et al. (2023) noted that the use of professional financial advising increases the chances that one engages in retirement planning. Nevertheless, the authors claim that trust in financial advisors is the vital factor in assessing the extent of the impact of the provided financial advice on retirement planning behavior. 58% of Jordanian adults also claimed that they did not have confidence in financial advisors due to the fees that they charge and the issue of conflict of interest and transparency. There are signs of some progress however despite the planning challenges Jordanians face regarding retirement. In Jordan there are some initiatives made by the government which promote retirement planning such as the introduction of national social security as well as taxation schemes that motivate the population to save for retirement (Social Security Corporation, 2021). Moreover, there is an emerging demand for Islamic products like the Sharia pension funds that fairly resonate with the religious and cultural values of most Jordanians (Alhawamdeh, 2023b).

### **Financial Advice and Retirement Planning Behavior**

Numerous studies have provided evidence that financial advice has a positive effect on retirement planning behaviour. Marsden et al. (2011) showed that those who went for professional financial advice are likely to engage in retirement planning activities which include; setting long-term goals, saving and accumulation of money on regular basis and diversification of investment. The authors also believe that financial advice assists the society in getting through the intricacies of retirement planning. Financial advice effects on retirement behavior from the perspective of Transtheoretical Model of Behavior Change (TTM) (Prochaska & DiClemente 1983). Financial knowledge is particularly effective in the precontemplation and contemplation stages of the transtheoretical model because it brings awareness and information to the change process for an individual to contemplate action related to retirement planning (Gutierrez & Hershey, 2014). At the preparation and action stages, financial counselling enables individuals to formulate specific saving and investment plans and course of action (Gerrans & Hershey, 2017). Researchers have also examined the role of trust in the interaction between financial advice and retirement planning behavior (AlQudah et al., 2023). Lachance and Tang (2012) concluded that trust in financial advisors was a significant factor in retirement planning behavior; behavior that was enhanced where the individual had high levels of trust in their financial advisor. The authors argue that trust is crucial for mitigating the uncertainty and complexity associated with retirement planning and helping individuals to implement retirement planning solutions offered by their advisors. Hence, the following hypothesis can be proposed:

### **H1: Financial advice positively influences retirement planning behavior in Jordan**

#### **Financial Advisors and Retirement Planning Behavior**

Concerning trust in financial advisors, it has been observed to play a significant role in retirement planning behaviour. Studies have demonstrated that people who have more trust in their financial advisors have increased chances of participating in retirement planning and acting on the recommendations that they receive. Lachance and Tang (2012) hypothesized that the trust in financial advisors will be significantly related to retirement planning behavior with the mediating effect for financial knowledge and risk tolerance. The authors suggest how trust helps individuals navigate the complexity and uncertainty of retirement to behave proactively. The Transtheoretical Model of Behavior Change (TTM) (Prochaska & DiClemente, 1983) can be helpful in understanding how trust in financial advisors can impact retirement planning throughout various stages: precontemplation, contemplation, preparation, action, and maintenance. At these early stages such as pre-contemplation and contemplation acceptance and trust in financial advisors is very important to make the client appreciate the need for retirement planning and to motivate the client to motivate action (Gutierrez and Hershey, 2014). It has also been observed that trust in financial advisors can promote the adoption of specific new retirement planning strategies and behaviors once individuals enter the preparation and action stages of the model; i. e. to increase contributions or adjust investment portfolios (Gerrans & Hershey, 2017). The TTM has more recently been used to describe the relationship between trust and financial advice on retirement planning behaviors. The study by Salter et al. (2014) has revealed that those in the action and maintenance stage of retirement planning had the highest levels of trust in their financial advisors as compared to those in the precontemplation and contemplation stage of retirement planning. To achieve this, the authors posit that trust is crucial because retirement planning can be maintained in the face of altered conditions caused by changes in life circumstances and market conditions. The following hypothesis can be proposed:

### **H2: Trust in financial advisors positively influences retirement planning behavior in Jordan.**

#### **Financial Advice and Financial Knowledge**

The influence of financial advice and financial knowledge has attracted interest in a number of empirical studies. Kramer (2016) in fact revealed that there was a positive relationship between engagement of individuals in financial advice and knowledge of financial aspects; this is indicative of the fact that financial advice seekers are more knowledgeable in terms of acquiring the right financial tools. This can be interpreted as showing the importance of the role financial advisors play in educating and informing their clients on the various issues relating to personal finance. The Transtheoretical Model of Behavior Change (TTM) (Prochaska & DiClemente, 1983) offers a useful framework for conceptualizing the interplay between advice and financial knowledge that goes beyond a binary understanding of advice as affecting only financial knowledge. In the beginning of the change, in the phases of precontemplation and contemplation the exposure to the financial advice can play the role of a catalyst and to motivate a person to want and seek knowledge in the sphere of finance (Davey et al., 2002). Financial advice takes on greater significance for people as they progress through the pre-contemplation, contemplation, and preparation and action stages and it provides individuals with specific ideas and methods for achieving successful financial behavior (Porto & Xiao, 2016). Another literature's strength of the TTM is its focus on the need to provide financial advice that is appropriate for a client's stage of change (Abuolien et al., 2024). Westermann et al. (2020) found that the effect of financial advice on learning differed immensely contingent to an individual's preparedness to learn on the topic of finance. The first change adopters needed general, conceptual advice, but the late change adopters wanted more specific, task-oriented help. This finding emphasizes the importance of personalizing the financial services advice provided by different advisors to the individual needs and understanding of each client, thus enabling the client to fully embrace the provided advice to achieve a better financial outcome. The following hypothesis is articulated based on the empirical evidence as well as the understandings coming from the TTM.:

### **H3: Financial advice positively influences financial knowledge.**

#### **Trust in Financial Advisors and Financial Knowledge**

Trust in financial advisors and financial knowledge is also a recurrent and crucial theme in recent empirical literature. Scholars continue to implement researches which demonstrate that the level of trust that an individual has for a financial advisor is an integral factor that fosters financial knowledge. Seckler et al. (2017) found that clients that have trust in their financial advisor were more inclined to pay attention to specific types of information in a way that facilitated comprehensive comprehension of the topic at hand. Prochaska and DiClemente provide the TTM, which explains why trust is related to financial knowledge. The stages of change suggest that the desire for trust to support learning intensifies as people move from the precontemplation to maintenance stages. At the first stage, the trust a person has in a financial advisor can be an effective incentive for the use of financial data and their reflection on the possibility of its further expansion (Zhao et al., 2020). As regards the preparation and action stages it is of great importance that trust becomes the medium of conveying information because it enables

the advisors to appropriately manipulate the content of information to the personal requirements of the client and his learning style (Stolper & Walter 2017; Afeef et al., 2024). But the TTM also stresses the importance of maintaining the recourse of trust between the advisor and the client during the change. Moreover, Seay et al. (2015) notes that clients who managed to maintain higher levels of trust in their advisors were more willing to use the new acquired knowledge and more willing to change their behavior regarding finances. This therefore means that trust is not only instrumental in the learning process about the finances but also their incorporation. Therefore, this study proposed that:

**H4: Trust in financial advisors positively influences financial knowledge.**

**Financial Knowledge and Retirement Planning Behavior**

Personal financial knowledge and retirement planning behavior has been one of the most prominent areas of investigation in the regard to personal finance. A number of empirical works in the recent past reveal that financial literacy has a significant association with proactive behavior in the preparation for retirement. This is not the case because Lusardi and Mitchell (2011) found that high levels of financial literacy were positively related to retirement planning and saving behavior. Such a result may reinforce the general idea that financial knowledge may be one of the most prominent predictors of retirement planning behavior. One of the possible theoretical perspectives that may be used to explain retirement planning behavior is the Transtheoretical Model of Behavior Change also known as the Stages of Change Model developed by Prochaska and DiClemente (1983). This becomes helpful in the initial stages such as precontemplation and contemplation as it offers more information to as to why it is necessary to involve in retirement planning and to motivate people in order to actualize an action (Sousa et al., 2017). The level of financial knowledge can be considered a strategic resource at BPS stages in the preparation and action stages and can be employed to make optimal decisions, set achievable goals, provide correct interventions, etc. (Kimiya ghalam et al., 2017). The following hypothesis can now be developed:

**H5: Financial knowledge positively influences retirement planning behavior.**

**Financial Knowledge as a Mediator**

The recent researches presented in the past years have focused on the financial knowledge as the mediator for financial decision-making. One of the peculiar results that stems from the earlier empirical research on the prior variables is that knowledge of finances is a moderator for some antecedents of such as financial advice and trust on advisors' financial behavior. Tang and Baker (2016) also performed another significant study and revealed that financial literacy significantly helps moderate the impact of financial knowledge on participants' retirement planning behavior. The behaviour change theory known as the transtheoretical model of behaviour change (TTM) by Prochaska and DiClemente (1983) is appropriate for explaining mediating through financial knowledge. Thus, the knowledge of financial information can be regarded as becoming a kind of second hand that helps an individual to make a transition from one stage of the change towards the next stage of change, including pre-contemplation stage, the preparation stage, the action stage and the maintenance stage. Financial information is always useful in the initial stages when individuals come to the idea that change is necessary and fosters its implementation (Barcellos et al., 2016). This is because as people reach the preparation and action stage the knowledge on finances becomes a great resource since they are able to determine their choices, formulate their objectives and use effective strategies to attain them (Kaiser & Menkhoff, 2017). Additionally, the TTM emphasizes the role of personalizing financial knowledge and recommendations based on where the individual is in their stage of change. However, Friedline and West (2016) found out that the positive effect of financial knowledge results on the increase in knowledge and behavioral change is different for different types of readiness to learn and act. This finding also supports the need for financial professionals to tailor the approach to the clients at their level of financial knowledge and time to ensure intervention is within the right time and content. The following hypothesis can be put forth:

**H6: Financial knowledge mediates the relationship between financial advice, trust in financial advisors, and retirement planning behavior**

**Conceptual Model**

Figure 1 below demonstrates a conceptual framework that illustrates the relationships between financial advice, trust in financial advisors, financial knowledge, and retirement planning behavior, through the lens of TTM (Prochaska & DiClemente, 1983). This framework assumes that trust in financial advisors and financial advice constitutes knowledge building blocks that drive retirement planning behavior. The effects of financial advice and the role that trust plays in influencing knowledge and behavior change become more significant as individuals progress through each stage of change outlined in the TTM – from precontemplation to maintenance (Marsden et al., 2011). The central hypothesis of this framework is that financial knowledge will serve as a mediating factor that explains how advice and trust translates into retirement planning success. The manner in which the individual perceives this mediation effect depends on the stage of change and the targeted intervention may be more useful for a person in the latter stage of change (Grable & Chatterjee, 2014). This conceptual framework aims to better

understand how these constructs interact with each other for the context of retirement planning in that particular country (Jordan).

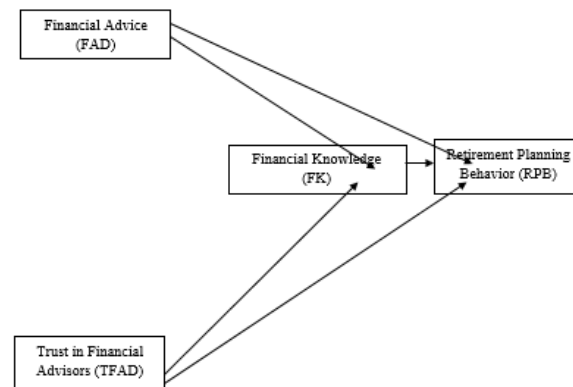


Figure 1 Conceptual Model

### Research Methodology

This research employed a cross-sectional survey approach with regard to the relationships that are of the study (Creswell & Creswell, 2018). The selected population for this research included working men and women, aged between 25 and 60 years, in Jordan. A 2023 report by the Department of Statistics in Jordan estimated that there were nearly 2 in Jordan. people of working age between 16 and 64 years at a given time at work. Sample size was estimated using the sample size estimation table by Krejcie and Morgan (1970). In light of the target population of 2,500,000 a sample size of 384 was deemed sufficient to meet a confidence level at 95% with a margin of error at 5%. The total of 450 questionnaires were used to accommodate non-respondents and incomplete questionnaires. The participants were asked to answer the questions on a 5-point Likert scale agreement. Overall, 412 participants completed the study without any missing values in total which amounted to 384 participants which concluded with the desired number of participants that was targeted in the survey. The sampling method followed was of stratified and convenience type. Another sampling technique called stratified sampling was also used to ensure that the sample was representative in nature; sampled population was again been put into age subgroups of 25-34; 35-44; 45-54 and 55-60 age groups (Sekaran & Bougie, 2016). Lastly, convenience sampling postulate was employed for every selected layer to identify those who are willing and readily available to participate in the research. The positive side of this approach is that it permits to receive the desired information with minimum losses of the representativity from the various generations. The ones selected for the given items of the questionnaire are borrowed from other literature. They were measured by applying the items of Marsden et al. (2011) for FAD and the items of Lachance and Tang (2012) for TFAD. The models for FK were adapted from Lusardi and Mitchell (2011), while RPB was operationalized by Hershey et al. 2007. The questionnaire was pre-tested using 20 respondents to identify any ambiguity and ensure that the respondents understood the questionnaire questions thoroughly. Then the pilot test was conducted on 50 samples in order to check the consistency and content validity of the instrument (van Teijlingen & Hundley, 2002). The following section provides a description of the sampling and data collection techniques employed: The data were collected using a self-administered online questionnaire that was distributed through distribution lists and social networking channels. It happened in the period February 2024 to April 2024 for the data collection. SmartPLS 4.0 was employed also to administer Partial Least Squares Structural Equation Modeling (PLS-SEM). PLS-SEM approach was selected because of its suitability for complex models involving several constructs and its effectiveness in handling non-normal data (Hair et al., 2017). Reliability and validity were used to test the measurement model, and the structural model was tested for path coefficients, significance levels, and predictive relevance. The study also ensured that it followed ethical principles. Consent was sought from the participants before the actual study was undertaken. All research procedures and materials used were anonymous and confidential, and the right to withdraw from the study was left open to participants. Ethical approval for the study was obtained from the respective institutional review board.

### Results and Discussion

Table 1 shows that the measurement model has high reliability and validity. Cronbach's alpha values for all constructs are above the recommended value of 0.7 (Hair et al., 2017), which is a high level of internal consistency. Financial Advice (0.905), Financial Knowledge (0.857), Retirement Planning Behavior (0.857), have high reliability (0.910 and 0.916, respectively). The composite reliability ( $\rho_c$ ) for all the constructs exceeds the recommended threshold of 0.7 (Hair et al., 2017), which also validates the reliability of the measures. Financial Advice (0.927), Financial Knowledge (0.891), Retirement Planning Behavior (0.857). Composite reliabilities for Trust in Financial Advisors (0.857). The AVE values for all constructs are higher than the recommended value of

0.5 (Hair et al., 2017), demonstrating construct validity. Financial Advice (0.680), Financial Knowledge (0.541), Retirement Planning Behavior (0.650), and Trust in Financial Advisors (0.703) have acceptable convergent validity. All factor loadings for all items are well above the recommended value of 0.7 and with the exception of some items in the Financial Knowledge construct (FK4, FK5, FK6, and FK7) (Hair et al., 2017). Nevertheless, these items contribute to the overall reliability and validity of the construct.

Table 1 Factor Loading and Reliability Results

Constructs	Factor Loadings	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
<b>Financial Advice</b>		<b>0.905</b>	<b>0.913</b>	<b>0.927</b>	<b>0.680</b>
FAD1	0.768				
FAD2	0.795				
FAD3	0.859				
FAD4	0.875				
FAD5	0.860				
FAD6	0.782				
<b>Financial Knowledge</b>		<b>0.857</b>	<b>0.865</b>	<b>0.891</b>	<b>0.541</b>
FK1	0.833				
FK2	0.806				
FK3	0.729				
FK4	0.685				
FK5	0.697				
FK6	0.690				
FK7	0.691				
<b>Retirement Planning Behavior</b>		<b>0.910</b>	<b>0.915</b>	<b>0.929</b>	<b>0.650</b>
RPB1	0.735				
RPB2	0.852				
RPB3	0.852				
RPB4	0.782				
RPB5	0.795				
RPB6	0.780				
RPB7	0.841				
<b>Trust in Financial Advisors</b>		<b>0.916</b>	<b>0.918</b>	<b>0.934</b>	<b>0.703</b>
TFAD1	0.810				
TFAD2	0.821				
TFAD3	0.854				
TFAD4	0.853				
TFAD5	0.835				
TFAD6	0.858				

Table 2 shows the Heterotrait-Monotrait (HTMT) ratio test of discriminant validity. HTMT values below 0.85 suggest adequate discriminant validity (Henseler et al., 2015). All HTMT values in the table are below this threshold that is from 0.611 to 0.716. The lower HTMT value is found between FK and RPB at 0.611, which indicates that these constructs are significantly different from each other. The highest HTMT value is recorded between FAD and TFAD which is 0.716 suggesting that these constructs are correlated, yet distinct from each other. The table 2 above clearly shows that the constructs are different from each other providing evidence for discriminant validity of the measurement model.

Table 2 Heterotrait-Monotrait Ratio Discriminants Validity Results

	FAD	FK	RPB	TFAD
FAD				
FK	0.624			
RPB	0.676	0.611		
TFAD	0.716	0.643	0.684	

Table 3 shows the results of the Fornell-Larcker criterion to test for discriminant validity. This criterion states that the square root of each construct's AVE should be higher than its correlation with other constructs (Fornell and Larcker, 1981). The numbers along the main diagonal – in bold – are the square root of each construct's AVE, and the numbers outside the main diagonal are the correlations among constructs. For this table all values in the diagonal are higher than their corresponding off-diagonal values; this reflects that each construct has higher shared variances with its own measures than other constructs. For instance, the square root of AVE of Financial Advice's (FAD) is 0.824 which is greater than its correlations with Financial Knowledge (0.560), Retirement Planning Behaviour (0.621), and Trust in Financial Advisors (0.635). These results further strengthen the validity of the measurement model.

Table 3 Fornell-Larcker Criterion Discriminants Validity Results

	FAD	FK	RPB	TFAD
FAD	<b>0.824</b>			
FK	0.560	<b>0.735</b>		
RPB	0.621	0.519	<b>0.806</b>	
TFAD	0.635	0.573	0.630	<b>0.839</b>

Table 4 displays the Variance Inflation Factor (VIF) findings which test for multicollinearity among the constructs. VIF values above 5 suggest that the problem of multicollinearity is high in a model (Hair et al., 2017). All VIF values of this table are well below the threshold of 5 which vary from 1.405 to 2.294. The highest VIF value is 2 between Financial Advice (FAD) and Financial Knowledge (FK). 0.294 which indicates that the relationships between these constructs are moderate and cannot be a major cause for concern over the possibility of multicollinearity. The lowest VIF value is obtained between the variables Financial Advice (FAD) and Retirement Planning Behavior (RPB) which is 1.405 level of correlation between these constructs. These results indicate that multi-collinearity does not exist in the model and all the constructs are moderately independent.

Table 4 VIF Results

	FAD	FK	RPB	TFAD
FAD		2.294	1.405	
FK			1.538	
RPB				
TFAD		1.640	1.481	

Table 5 summarizes the findings of the Common Method Bias (CMB) test using the principal component extraction method. CMB refers to the variance that is not brought about by the constructs measured but by the measurement method itself (Podsakoff et al., 2003). The table above indicates that the first four components have eigenvalues greater than 1 and the first component has 48% of the variance. 471% of the total variance. But to support the presence of CMB, one factor should explain more than half of the total variance (Podsakoff et al., 2003). None of the factors can explain more than 50% of the variance and this shows that CMB is not a big deal in this study. In addition, the variance explained by the four components has accumulated to 67.622%, which is above the recommended threshold of 50% (Hair et al., 2017), thus signifying that the measured variables measure the constructs sufficiently.



Table 5 Common Method Bias Results

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	12.602	48.471	48.471	12.602	48.471	48.471	7.369	28.342	28.342
2	2.733	10.513	58.984	2.733	10.513	58.984	4.800	18.462	46.804
3	1.171	4.502	63.486	1.171	4.502	63.486	3.175	12.210	59.014
4	1.075	4.136	67.622	1.075	4.136	67.622	2.238	8.608	67.622

Table 6 shows the R-square, F-square and Q-square values for the endogenous constructs Financial knowledge (FK) and Retirement planning behavior (RPB). The R-square value for FK is 0.30.350; explaining that 35 percent of the variance in FK is accounted by the exogenous variables of Financial Advice (FAD) and Trust in Financial Advisors (TFAD). R-Square value for RPB is 0.715 which implies that seventy one percent of the population is poor. The model accounts for 5% of the variance in RPB. The F-square values measure the predictive relevance of the exogenous variables on the endogenous variables. The F-square value for the effect of FAD and TFAD on FK is 1.008 which reflects a large effect size according to Cohen, (1988). The F-square value for the effect of FAD, TFAD, and FK on RPB is 2.034, indicate a very large effect size. The Q-square values derived by means of blindfolding indicates the predictive relevance of the model. Q-square values higher than zero mean that the construct has predictive relevance (Hair et al., 2017). The Q-square values for FK are 0.184 and RPB (0.454) are above zero and offer evidence for the model's predictive validity.

Table 6 R-square, F-square, and Q-square Results

	R-square	F-square	Q-square
FK	0.350	1.008	0.184
RPB	0.715	2.034	0.454

Table 7 and Figure 2 display the structure effect of the constructs of the model as path coefficient (beta values) standard deviation, t-statistics, and p-value. The findings are in line with the hypothesized relationships, and confirm all of the predicted relationships, which is consistent with previous research. Goal 1 as positive effect of FAD on RPB contingent ( $\beta = 0.136$ ,  $t = 2.315$ ,  $p = 0.000$ ). This is consistent with research conducted by Marsden et al. (2011) who indicated that participants of financial advising are more likely to engage in retirement planning techniques than others who do not receive the help. H2, which assumes moderate control over TFAD by RPB, is also confirmed ( $\beta = 0.136$ ,  $t = 2.475$ ,  $p = 0.013$ ). This finding is also in line with the study by Lachance and Tang in 2012 that establishing trust on financial advisors led to change in retirement planning. The hypothesized positive relationship between H3 and FAD and FK is also supported ( $\beta = 0.269$ ,  $t = 4.341$ ,  $p < 0.001$ ). This is in line with Kramer's 2016 observation that seeking and getting financial advice can increase an individual's knowledge in finance. H4 which suggests a positive association between TFAD and FK also holds true ( $\beta = 0.349$ ,  $t = 4.952$ ,  $p < 0.001$ ). This aligns well with Kramer's (2016) argument that trust on the financial advisors may make consumers to acquire the financial knowledge easily. H5: This predicts the positive relationship between FK and RPB and that has been found to hold true ( $\beta = 0.665$ ,  $t = 20.902$ ,  $p < 0.000$ ). In this case, this finding is similar to the work of Lusardi and Mitchell (2011) which pointed out how important it is to contribute to the improvement of financial knowledge involved in retirement planning.

Table 7 Structural Results

Hypotheses	Path Relationship	Beta	Standard deviation	T statistics	P values	Results
H1	FAD -> RPB	0.136	0.059	2.315	0.021	Supported
H2	TFAD -> RPB	0.136	0.055	2.475	0.013	Supported
H3	FAD -> FK	0.269	0.062	4.341	0.000	Supported
H4	TFAD -> FK	0.349	0.07	4.952	0.000	Supported
H5	FK -> RPB	0.665	0.032	20.902	0.000	Supported

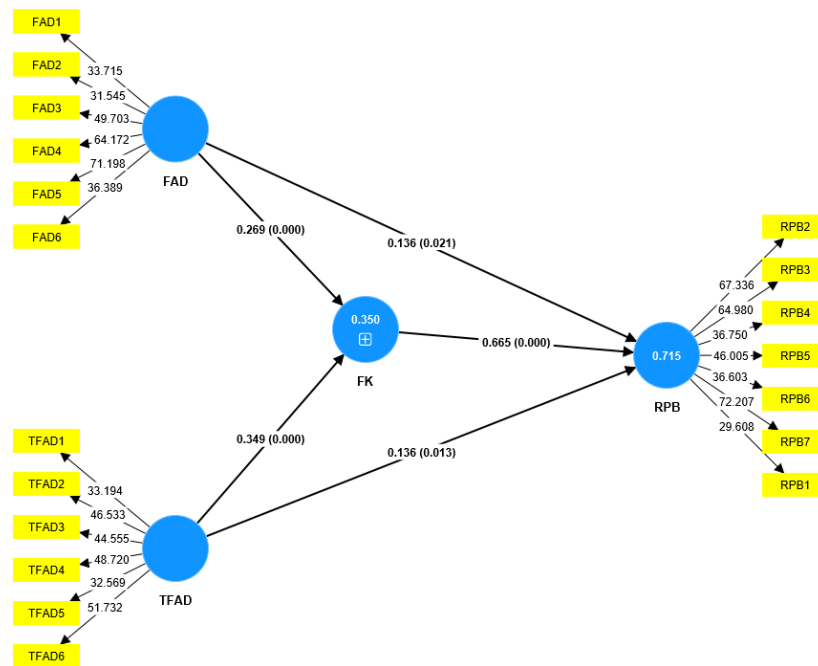


Figure 2 Graphical Structural Results

Table 8 shows the indirect effects of independent variables FAD and TFAD on RPB through FK in the mediation analysis through the indirect method. H6: Hypothetically, FK regulates the link between FAD and RPB. The fact that the results support this hypothesis can be observed with the fact that  $\beta = 0.179$ ,  $t = 4.188$ ,  $p < 0.001$  – which means the intern did indirectly test the influence of financial advice on retirement planning behavior through its effect on financial knowledge. This is in line with the recent research by Pagliaro and Utkus (2017) which shows how effective financial advice can have positive outcomes on retirement planning practices through improved knowledge. H7 states the hypothesis that FK moderates the relationship between TFAD and RPB. It also gave statistical support to this hypothesis ( $\beta = 0.232$ ,  $t = 5.202$ ,  $p < 0.000$ ) ably linked to retirement planning behavior and financial knowledge (001), which implies that trust in financial advisors positively affects retirement planning behavior through financial knowledge. This is consistent with the result of Stolper & Walter (2017) about the relationship between the trust in financial advisors and the enhancement in financial knowledge to improve financial decisions.

Table 8 Mediation Analysis Using Indirect Method

Hypotheses	Path Relationship	Beta	Standard deviation	T statistics	P values	Results
H6	FAD-> FK -> RPB	0.179	0.043	4.188	0.000	Supported
H7	TFAD -> FK -> RPB	0.232	0.045	5.202	0.000	Supported

## Discussion

The positive relationships between FAD and RPB, and TFAD and RPB indicate that there is a need for individuals to trust and receive financial advisory and do retirement planning behavior. These findings are in alignment with prior research which suggests that financial advice encourages positive financial behavior (Marsden et al., 2011) and that trust in advisors is an imperative aspect of financial advice (Lachance & Tang). Regarding the TTM, enhancing financial knowledge and building trust in financial advisors may assist individuals to move from the precontemplation and contemplation stages to the preparation and action stages of retirement preparation. Consultation can enhance contemplation, which refers to the awareness of the need for retirement planning and preparation to establish a retirement plan. Trust in advisors can promote the individual's sense of self-efficacy and his or her ability to enact the plan (action). The positive associations between FAD and financial knowledge (H3) and TFAD and FK (H4) suggest that financial advice and trust in advisors can positively predict financial knowledge. These findings are in line with previous studies that have shown that financial advice can contribute to financial knowledge (Collins 2012) and that trust in advisors can enhance financial knowledge (Kramer 2016). In the context of the TTM, increased level of financial knowledge may assist people to move through the stages of change since it influences comprehension of retirement planning issues and procedures (contemplation and

preparation). Financial knowledge at higher levels may also boost the person's self-efficacy and factors in decisional balance to promote the behavioral stages of adoption and maintenance of the retirement planning behavior (action and maintenance). There is a clearly established positive correlation between RPB and FK indicating the importance of financial knowledge in encouraging people to saving for retirement purposes. This is a natural observation, and it is in line with Lusardi and Mitchell's (2011) conclusions about the impact of financial knowledge on retirement planning. In the context of the TTM, financial knowledge may be viewed as an essential element which individuals can use in an attempt to reach every stage of change. Financial knowledge can help with this by spreading the word about retirement planning (precontemplation), creating a awareness about retirement planning (contemplation and preparation), and providing details about the development of a retirement plan (action and maintenance). Further evidence for the mediating force of financial knowledge in the FAD-TFAD-RPB link was obtained from the mediation ANOVA in Table 8. Almost 0.06 per cent significance values on indirect effect and 0.10 per cent significance values on indirect effect of FAD and TFAD on RPB through FK shows that financial advice and trust on advisors have influence on retirement planning behavior by improving financial knowledge. The results are consistent with previous literature which has indicated that financial advice and trust in advisors is a catalyst to better financial decision-making for better financial understanding (Pagliaro & Utkus, 2017; Stolper & Walter, 2017). In this respect, the mediation results of the above study indicate that these effects of advices and trust of advisors are mediated by financial knowledge in facilitating movement through the stages of change for retirement planning behaviour as perceived with the TTM. Doing more of financial advice and trusting advisors may help people gain the knowledge and skills to move from no intention to contemplation, from contemplation to preparation, and from preparation to action in retirement planning; whereas the information from increased financial knowledge might support the maintenance of retirement planning behavior..

### Conclusion

The purpose of this study was to examine both the direct and indirect effects of financial advice, trust in financial advisors, and financial knowledge on retirement planning behavior and their financial knowledge. In order to achieve these objectives, a quantitative paradigm was applied and data was collected from 412 employed people aged between 25-60 years using an online survey in Jordan. The results of tests conducted by applying Partial Least Squares Structural Equation Modeling (PLS-SEM) offered high support for the proposed hypotheses. Financial knowledge and trust as two indicators of financial well-being revealed positive relationships with retirement planning. Moreover, financial knowledge and financial trust were also positively correlated with financial knowledge and financial knowledge had a strong positive effect on retirement planning behaviour. The above conclusions show that financial advice, trust in financial advisors, and financial knowledge are predictors of retirement planning behaviors. The findings show that individuals who receive financial advice, have more confidence in their advisor and have a higher degree of knowledge about financial matters tend to be involved in retirement-related activities. This study is significant in the literature as it provides empirical evidence for the interrelationships between financial advice utilization versus trust in financial advisors, financial knowledge, and retirement planning practices in the Jordanian context. These results reinforce the need to support the trust in financial advisors, offer financial advice access, build financial knowledge to improve retirement planning outcomes.

### Implications of the Study

The results of this research provide valuable insights for managers working in financial sector. First, managers must focus on developing and sustaining trust between these advisors and their clients because the issue of trust is a critical antecedent of retirement planning behavior. This can be through the trait of transparency, consistency, and objectivity in fulfilling a client's interest. Moreover, it is important to invest in the professional development and training of financial advisors to ensure that they have the right skills to counsel them in the right way. Last but not least, managers need to think about how to develop models to evaluate the impact of the current attitudes toward financial advice services on the behavior of individuals in relation to retirement planning. This study can also benefit diverse groups of stakeholders in the following ways. This would be useful information for policy makers to consider as they work to improve retirement planning through expanding access to financial planning advice and knowledge. This may include policy measures such as supporting the provision of financial advice or offering tax incentives for doing so or introducing financial knowledge in schools. The survey results indicate that providing financial planning and knowledgeal benefits represents an important strategy that employers can adopt to encourage their employees to engage in retirement planning. For consumers, the overall implications are that they should consider obtaining professional advice and educate themselves to ensure prudent decision-making in later life. It is able to advance the literature on financial advice, trust, financial knowledge, and retirement planning behaviour by shedding light on the relationship between these phenomena within Jordanian context. The findings also provide the evidence for the application of TTM to understanding retirement planning behavior and the role of financial advice, trust, and knowledge. Another key contribution of the study is the identification of how the relationships among financial knowledge, and purposeful spending and saving behaviors are mediated by financial

knowledge. Additionally, the study adds to existing research on financial advice and retirement in the Middle East and North Africa region, which mainly focuses on the Western world. From these results some social implications can be deduced. Access to financial advice and trust in retirement planning can effectively improve financial knowledge and retirement planning behavior and lead to more optimal outcomes in saving for retirement. All this will enable to fight hunger more effectively and eradicate poverty among the elderly population and thus relieve the pressure on social welfare institutions. It also contributes to the overall objective of ensuring that people plan their financial future because people can enhance their abilities to gain control over their finances through planning. Last but not least, by stressing how trust is valuable for a financial advisor, the study emphasizes the concern for the ethical and morally responsible approach in providing financial services in order to protect consumers and ensure the overall legitimacy of the finance sector.

### Limitations of the Study and Future Studies

There are several limitations to this study that bear on the answers to the underlying questions posed in this research; specifically, financial advice, trust, financial knowledge, and retirement planning behavior. First, the study was primarily based on surveys from individuals, which can be prone to socially acceptable answers or provided information from memory. Second, the cross-sectional nature of the present study can prevent making assumptions about whether there are causal relationships between the measured variables. The study is limited by the fact that it was conducted in Jordan and the results cannot be generalized to other countries with different cultures and financial systems and the values related to retirement planning. Above all, there may be additional confounds for which those who are within the least trained group have been adjusted which have not been factored into the study. There are a number of areas for future research that supported by this particular study. Second, future research could adopt longitudinal designs to measure the relationships between seeking for financial advice, perceived level of trust, financial knowledge, and retirement planning behavior throughout the life course. Second, researchers could investigate the mediation or moderation effect of other possible third variables in these models, for example, the risk preference, financial capability, or cultural attitudes towards wealth and retirement. Third, future research could also tackle the efficacy of various kinds of financial advice services or various delivery channels (for example). Whether online channels contribute to the practice of retirement planning behaviour. Fourth, looking at empirical evidence from selected countries or countries in selected continents could also yield insights to the possible differences across context on the nature of relations between these variables and the impact they may have on knowledge outcomes. In addition, qualitative research might be helpful to our deeper understanding about people's experiences and perceptions regarding financial advice and retirement in terms of trust in the advisor and general knowledge.

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