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FINTECH EXPOSURE AND INVESTMENT DECISIONS IN OMAN: THE MEDIATING ROLE OF INVESTOR PSYCHOLOGY IN SHAPING INVESTMENT INTEREST

Mohamed Zaheeruddin[1*] https://orcid.org/0000-0003-0561-8654
Corresponding author email address: Mohamed.Zaheer@utas.edu.om
[1*]- Lecturer, Department of Economics and Business Administration, University of Technology and Applied Sciences- Shinas, Sultanate of Oman

Suneel Kumar[2] https://orcid.org/0000-0002-7883-6700
[2]- Lecturer, Department of Economics and Business Administration, University of Technology and Applied Sciences- Shinas, Sultanate of Oman

,
Dr. Imthiyaz Ahmed Muhammad[3] https://orcid.org/0009-0009-3408-3418,
[3]- Lecturer, Department of Economics and Business Administration, University of Technology and Applied Sciences- Shinas, Sultanate of Oman

Chandrabai Thumma[4,] https://orcid.org/0000-0001-9699-3016
[4]- Faculty in Management, Kakatiya Institute of Technology and Science, Telangana, India

Vimal Kumar Agarwal[5] https://orcid.org/0009-0003-9371-575X
[5]- Senior Lecturer, Department of Economics and Business Administration, University of Technology and Applied Sciences- Shinas, Sultanate of Oman

Sunder Rajan.N[6]
[6]- Lecturer, Department of Economics and Business Administration, University of Technology and Applied Sciences- Shinas, Sultanate of Oman

Abstract

The expansion of financial technology has transformed investment decision-making in emerging economies. In Oman, investor psychology significantly shapes perceptions of FinTech platforms, where biases, confidence, and risk tolerance influence investment interest and decision-making, underscoring the need to explore FinTech–psychology interactions. The purpose of this research was to explore the influence of FinTech exposure on investment interest leading to investment decisions

among individuals in Oman, with investor psychology as a mediating factor. Using a quantitative survey methodology, the researchers analyzed the relationship between familiarity and usage of FinTech platforms and investor psychology such as perceived usefulness and risk perception, which shape investment interest. Structural Equation Modeling (SEM) was used for data analysis. The outcomes exposed a significant optimistic connection among FinTech exposure and investment interest, with investor psychology acting as a crucial mediator. Specifically, perceived usefulness and reduced risk perception associated with FinTech platforms were found to significantly enhance investment interest among the respondents. This study concludes that FinTech exposure plays a vital role in fostering investment interest by positively influencing investor psychology and making investment decisions. These findings suggest that financial institutions and FinTech companies should develop user-friendly platforms and targeted education programs to improve investor engagement. Future research should explore how demographics and cultural factors in Oman moderate these relationships.

Keywords: Fintech, Investor Psychology, Financial Institutions, Investor engagement, investment interest, investment decisions

1. Introduction

As Financial Technology (FinTech) is rapidly proliferating, overall economic reform is experiencing a profound revolution. FinTech, a wide scale of technical inventions that boost and automate monetary services, is transforming the way individuals interact with financial markets (Arner, Barberis, & Buckley, 2016; Goldstein, Jiang, & Karolyi, 2019). Access to investment opportunities has been democratized by the digital revolution, offering unparalleled convenience and efficiency. This transformation aligns perfectly with Oman Vision 2040, an economic vision that emphasizes technology's crucial role in creating a knowledge-based society and diversifying the economy (Central Bank of Oman, 2021). With the increasing adoption of FinTech solutions, from digital banking to online trading platforms, Oman is showing its commitment towards technological advancements (Zaheeruddin, M.., & Kumar, S. 2025).

As FinTech becomes increasingly popular, questions arise about how it will affect investment behaviour, particularly in Oman's unique socio-economic environment. Financial institutions, policymakers, and FinTech companies that wish to promote informed investment decisions must understand how Omanis perceive and interact with FinTech platforms. Despite the numerous benefits FinTech offers, it also introduces complexities related to risk perception, information processing, and behavioural biases (Baker, Kumar, & Goyal, 2019; Peón & Antelo, 2021).

According to this research model, FinTech exposure is influenced by an individual's interaction with digital financial platforms, both directly and indirectly. Investor psychology draws in indirect influence, which includes factors such as perceived usefulness, perception of risk, and susceptibility to behavioural biases. It is critical to understand these psychological mechanisms in the local context (Mirzaei & Buer, 2022), where financial literacy and cultural norms may influence investment decisions (National Centre for Statistics and Information 2018, Oman).

As part of Oman Vision 2040, this study contributes insights into how FinTech can be effectively leveraged to promote informed investment behaviours in Oman (Al Mamari et.al. 2025). The study of

investor psychology can help develop FinTech solutions and educational initiatives tailored to Omani investors' specific needs and challenges. It will also shed light on the interplay between investor psychology and technological adoption within a developing economy context, which will be helpful to other nations undergoing digital transformations of similar magnitude (Al Hasani, M. 2015).

2. Literature Review

2.1 FinTech Adoption and Investment Behaviour

With FinTech evolving rapidly, individuals have access to investment opportunities that have never been possible before (Arner, Barberis, & Buckley, 2016) and studies have shown that exposure to digital financial platforms can lead to greater investor engagement and market participation (Goldstein, Jiang, & Karolyi, 2019).

The accessibility of online trading platforms, robo-advisors, for instance, can reduce the cognitive burden associated with investing decisions by providing real-time information and personalized investment recommendations (Zhang, 2025). Having such platforms available in Oman is likely to have a similar effect, giving individuals more control over their financial futures.

There are, however, a variety of investor psychology that influence the adoption of FinTech and investment behaviour, including perceived usefulness, risk perception, and behavioural biases (Baker, Kumar, & Goyal, 2019). An individual's perception of FinTech's usefulness is a crucial determinant of adoption as it indicates how the platform will enhance their investment performance (Venkatesh, Morris, Davis, & Davis, 2021). FinTech solutions' perceived usefulness may give a substantial impact on investing outcomes in Oman, where financial knowledge is still developing (Mirzaei & Buer, 2022).

2.2 Investor Psychology and Investment Decisions

Investing decisions are heavily influenced by investor psychology (Gadasandula , K. et. Al. 2024) Individuals deviate from rational decision-making due to cognitive biases and emotional factors (Baker & Nofsinger, 2010; Baker & Ricciardi, 2014). For instance, investors may be overconfident, preceding to extreme trade off and most favourable financing outcomes (Gervais & Odean, 2001). Understanding these psychological biases is crucial in Oman, where cultural norms may influence risk aversion and decision-making styles (National Centre for Statistics and Information 2018, Oman).

The perception of risk is another crucial element of investor psychology that involves an individual's subjective assessment of the potential losses associated with investment decisions (Kahneman & Tversky, 1979). FinTech platforms can influence risk perception by providing real-time data and tools for hazard supervision. The crucial part is that people perceive digital platforms differently, depending on their familiarity with technology and their trust in online security. In Oman, where trust in digital transactions is crucial for the success of Oman Vision 2040, addressing these concerns is crucial.

2.3 Financial Literacy and Investment Behaviour

The capacity to grasp and apply economic concepts are the essential determinant of making informed investment decisions (Chen & Volpe, 1998). According to research, persons with advanced financial literateness tend to make improved venture choices and avoid costly mistakes (Van Rooij, Lusardi, & Alessie, 2011). By enhancing financial education can empower individuals in Oman, where efforts are being made to promote financial literacy (Mirzaei & Buer, 2022).

The established theories of investor psychology (perceived usefulness, risk perception, behavioral biases) gain critical relevance within the Omani FinTech landscape. As FinTech democratizes

investment access, understanding how these digital tools interact with the Omani investor's psychological profile is essential. In a nation pursuing Oman Vision 2040, which prioritizes digital trust and financial literacy, the study focuses on how FinTech exposure modulates investor psychology (e.g., culturally influenced risk attitudes). This link explains how technological advancements are filtered through the investor's mind, ultimately shaping the investment interest vital for Oman's economic diversification and modernization.

3. Theoretical Framework

In this study, the affiliation between FinTech exposure, shareholder psychology, and investment interest and decisions are examined using the Technology Acceptance Model (TAM) and behavioural finance theories. As per TAM, apparent effectiveness and perceived ease of use are important determinants of know-how acceptance (Venkatesh et al., 2021). As per FinTech, these reasons are likely to influence an entity's decision to use digital financial platforms.

The psychological features that persuade financing results are analysed by behavioural finance theories (Jaffer, D. S. et al., 2025). These theories emphasize the importance of cognitive biases, emotional factors, and risk perceptions. By integrating TAM with behavioural finance theories, this study attempts to afford a broad perception of the mediating role of investor psychology in FinTech exposure and investment interest.

4. Research Gap:

Despite extensive literature exploring FinTech's global impact, its specific impact on Oman's investment behavior remains mostly unexplored. A significant research gap exists in understanding how the unique Omani context mediates the relationship between FinTech exposure and investment interest, particularly factors such as perceived usefulness and risk perception. Also, existing studies often overlook Oman's unique cultural and socioeconomic factors, which greatly influence FinTech adoption and investment choices. There is also a lack of empirical research linking FinTech adoption to the strategic goals of Oman Vision 2040, and a scarcity of studies examining the role of behavioral biases among Omani investors using FinTech.

Considering the unique socio-economic context of Oman, this analysis researches the complex liaison among FinTech exposure and investment interest. The existing literature often overlooks the cultural nuances and developmental stages of emerging markets such as Oman, making it essential to understand how Omani investors perceive FinTech platforms and interact with them. A vast volume of research has been overseen on the mediating role that investor psychology plays in shaping Omani market decisions, including factors such as perceived usefulness, risk perception, and behavioral bias. Furthermore, Oman's distinct cultural and socio-economic factors, as well as the alignment of FinTech adoption with Oman Vision 2040, remain largely unexplored. To address these variances, this study will provide data-driven insights from a sample of 504 Omani respondents, in order to contribute to a context-specific understanding of how FinTech impacts investment behavior.

5. Objectives of the Study

This study aims to explore the relationship between FinTech exposure and investment behavior among Omani respondents. Specifically, it seeks to determine whether exposure to FinTech directly correlates with individuals' investment interest and their ultimate investment decisions. Furthermore, the study examines the mediating role of investor psychology—focusing on factors such as perceived

usefulness, risk perception, and behavioral biases—in shaping the link between FinTech exposure and investment interest. In addition, the research investigates how both FinTech exposure and Investor's Psychology influence investment interest and decisions within the unique socioeconomic and cultural context of Oman.

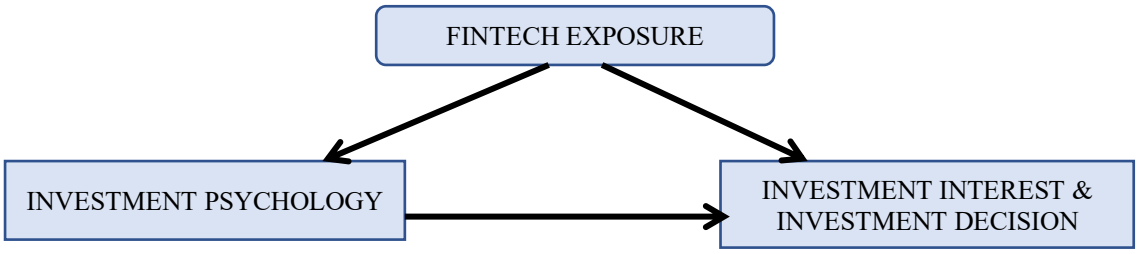

Figure 1. Conceptual Framework of The Study
Source: Developed by authors

Hypothesis

H1: FinTech exposure has a substantial positive precise impact on investment interest and decisions among Omani respondents.

H2: Investor psychology (specifically perceived usefulness, risk perception, and behavioral biases) significantly mediates the relationship between FinTech exposure and investment interest among Omani respondents.

H3: FinTech exposure and investor psychology (specifically perceived usefulness, risk perception, and behavioral biases) have a significant positive influence on investment interest and investment decisions among Omani respondents, considering the socio-economic and cultural context of Oman.

6. Methodology

This study adopts a descriptive research design to examine FinTech exposure and investment decisions among the Omani population. A structured survey instrument was administered both online and in person. The online survey mode was preferred to reach respondents across distant geographic locations, while in-person data collection was effective for gathering responses from easily accessible areas. The dual-method approach enhanced response rates and minimized sampling bias across different regions.

The survey instrument was divided into sections. The first section of the research instrument captured demographic information about the respondents. The subsequent sections included Likert-type scales for collecting responses about investors' psychology, fintech exposure, investment interest, and investment decision-making. These scales consisted of items derived from established and validated scales. The questionnaire was developed and adapted to the Omani context.

FinTech platform usage, such as online banking, mobile trading, and robo-advisory services, was measured using items that captured the frequency and diversity of usage. Validated scales were employed to assess perceived usefulness, risk perception, and behavioural biases. Investment interest was measured through items evaluating respondents' willingness to seek investment-related

information and their intention to invest in a range of financial products.

7. Data Collection and Sampling

A total of **504 respondents** from 11 governorates of Oman participated in the study. Participants were selected using **convenience sampling.** Convenience sampling is appropriate when the target population is geographically dispersed, and data can be obtained efficiently from readily accessible respondents (Etikan, Musa, & Alkassim, 2016). This sampling strategy also provided flexibility in obtaining responses from various regions of the country. The study focuses on **educated urban populations**, including **academic professionals, employees in public and private organizations, and university students**. Participants were required to have at least **one operational bank account,** ensuring familiarity with financial transactions. Respondents' email IDs were obtained from their organizational sources.

Although respondents were drawn from all the governorates of Oman, **North Al Batinah accounted for 71.4% of the sample,** reflecting easier access and higher engagement. Table 1 presents the **regional distribution** of respondents.

8. Ethical Considerations

Participants were provided with a clear explanation of the research purpose, confidentiality measures, and voluntary participation, and could access the survey only after providing informed consent. Data were anonymized, stored securely, and used exclusively for academic research purposes. The survey did not ask for personal identification, and they were assured of anonymity. Participant privacy and compliance with ethical norms were maintained throughout the research process.

9. Data Analysis

The survey responses were coded and analyzed using the Statistical Package for the Social Sciences (SPSS). The data analysis began with descriptive statistics to summarize respondent demographics and variable distributions, followed by correlation analysis to examine associations among investor psychology, FinTech exposure, investment interest, and investment decision-making. Subsequently, regression analysis was performed to examine the direct effects of the independent variables on Investment Interest and Investment Decisions. Finally, the Sobel test was conducted to evaluate the mediating role of FinTech exposure, examining whether it transmits the influence of investor psychology on investment outcomes.

Variables were clearly mapped to analyses, investor psychology served as the predictor, FinTech exposure as the mediator, and investment interest/decision-making as the dependent variable.

10. RESULTS AND DISCUSSIONS

This study is based on the data collected through an online survey in Oman from 504 respondents. The survey instrument included five sections; demographics related questions were asked in the first section. Respondents were asked to provide details about their geographic location, gender, age, education, marital status, and monthly income. The subsequent sections included Likert's type scales for collecting responses about investors' psychology, fintech exposure, investment interest, and investment decision-making.

Details given in the Table 1 shows that a total of 13 items were related to the investors' psychology whereas other three variables had seven items for each. Respondents were informed about the purpose

of data collection and they were assured about the confidentiality and ethical use of data collected through the survey. The reliability of the questionnaire was examined by using Cronbach's Alpha. As shown in the Table 1, the Cronbach's Alpha for the scales was 0.89 for investment interest and investment decision-making, 0.92 for fintech exposure, and 0.90 for investors' psychology. The Cronbach's Alpha values show that the survey instrument included reliable scales.

Table 1: Scale Reliability

S.N.	Scale	Number of Items	Cronbach's Alpha
1	Investor's Psychology	13	0.90
2	FINTECH Exposure	7	0.92
3	Investment Interest	7	0.89
4	Investment Decision-Making	7	0.89

Table 2 shows the demographic profile of the respondents in this study. A total of 504 respondents all over Oman and were included, predominantly from the North Al Batinah region, which accounted for 71.4% of the total sample. This indicates that the majority of the study's respondents are concentrated in this area, which may reflect the focus of the study or the higher population density and accessibility in this region. Other regions such as Buraimi (9.5%), and Muscat, Al Dakhiliya, South Batinah, and Others (each contributing 3.6%) were also represented, while Al Dhahira and Musandam contributed the least, with only 2.4% each.

In terms of gender, the study sample was predominantly female, constituting 72.6%, compared to 27.4% male respondents. This suggests a strong female representation, which could be particularly relevant if the study is exploring behavioral or investment decisions among women, especially in the context of specific regions like North Al Batinah.

The age distribution shows that the majority of respondents fall within the 20–30 years age group (61.9%), indicating a youthful participant base. This is followed by those aged 31–40 years (20.2%), 41–50 years (15.5%), and a small proportion of individuals aged over 50 years (2.4%). The dominance of younger respondents may suggest higher engagement from the younger population or reflect the demographic structure of the region.

With respect to educational qualifications, 71.4% of respondents are graduates, followed by high school graduates (11.9%), postgraduates (9.5%), and doctorate holders (4.8%). A small percentage (2.4%) identified with other educational backgrounds. The high percentage of graduates reflects a well-educated sample, which may influence decision-making behaviors explored in the study.

When examining marital status, the distribution is fairly balanced, with 52.4% of respondents being married, and 47.6% unmarried. This balance allows for comparative analysis across different life stages.

Finally, the monthly income levels reveal that nearly half (47.6%) of the respondents earn less than 500 OMR, followed by 29.8% earning between 501–1000 OMR. Smaller proportions fall into higher

income brackets, with 10.7% earning 1001–1500 OMR, and 6% each in the 1500–2000 OMR and above 2000 OMR categories. This indicates that a significant portion of respondents belong to the lower income group, which may impact their investment capacity or financial behaviors.

Table 2: Respondent's Demographic Profile

Variables	Particulars	Frequency	Percent
Region	North Al Batinah	360	71.4
	Muscat	18	3.6
	Al Dakhiliya	18	3.6
	Al Dhahira	12	2.4
	South Batinah	18	3.6
	Musandam	12	2.4
	Buraimi	48	9.5
	Others	18	3.6
Gender	Male	138	27.4
	Female	366	72.6
Age	20-30 Years	312	61.9
	31-40 Years	102	20.2
	41-50 Years	78	15.5
	More than 50 Years	12	2.4
Education	Graduate	360	71.4
	Post Graduate	48	9.5
	Doctorate	24	4.8
	High School	60	11.9
	Other	12	2.4
Marital Status	Married	264	52.4
	Unmarried	240	47.6
Monthly Income	<500 OMR	240	47.6
	501-1000 OMR	150	29.8
	1001-1500 OMR	54	10.7
	1500 - 2000 OMR	30	6.0
	>2000 OMR	30	6.0

Bi-variate correlation coefficients were computed to analyze the relationship between variables. As shown in Table 3 investors' psychology associates positively with fintech exposure (r = 0.621, sig. 0.01 levels), also with investment interest (r = 0.717, sig. 0.01 levels) and investment decision-making (r = 0.686, sig. 0.01 levels). It shows that respondents who are positive about investment have better fintech exposure, and investment interest, as well as they intend to take investment decisions. The available statistics shows that fintech exposure relates positively with investment interest (r = 0.708, sig. 0.01 levels) and investment decision-making (r = 0.639, sig. 0.01 levels). The statistics shows that respondents having fintech exposure show interest in investments, and they intend to take the

investment decisions (Table 3). Further, the statistics given in the Table 3 shows that investment interest and investment decision-making are positively associated (r = 0.793, sig. 0.01 levels), it indicates that a respondent having interest in investments would like to take investment decisions.

Table 3: Correlation between Variables

S.N.	Variables	1	2	3
1	Investors' Psychology			
2	Fintech Exposure	.621**		
3	Investment Interest	.717**	.708**	
4	Investment Decision Making	.686**	.639**	.793**
**. Correlation is significant at the 0.01 level (2-tailed).				

To examine the mediating effect of fintech exposure on the relationship between investors' psychology and investment interest. A mediating variable accounts for the relation between the predictor and the dependent variable (Baron and Kenny, 1986). There are certain conditions for a mediating variable such as the predictor significantly account for variation in the presumed mediator; also, the presumed mediator is a significant predictor of the dependent variable. Further, if these two interactions are controlled, a previously significant relation between the independent and dependent variables does not remain significant (Baron and Kenny, 1986). Sobel test was performed to examine if fintech exposure mediates the relationship between investors' psychology and investment interest. The Sobel test is used to determine if a variable mediates the effect of a predictor on the dependent variable (Neiheisel, 2017). A significant test score for the Sobel test indicates that an independent variable has an indirect effect (i.e., an effect that is mediated in whole or in part through another variable) on the dependent variable (Neiheisel, 2017).

The statistics given in the Table 4 shows that investor psychology is a significant predictor of investment interest, it has a positive and significant on the investment interest (B = 0.44, t = 23.06, Sig. 0.01 levels). Moreover, investors' psychology has positive and significant impact on the fintech exposure (B = 0.39, t = 17.77, Sig. 0.01 levels). Additionally, the Fintech exposure has positive and significant impact on the investment interest (B = 0.70, t = 22.45, Sig. 0.01 levels). The Sobel test score was computed using an online calculator (available at https://quantpsy.org/sobel/sobel.htm), the test score was observed 13.93, p<0.01. The test score shows that the fintech exposure significantly mediates the relationship between investor psychology and investment interest (see Figure 1).

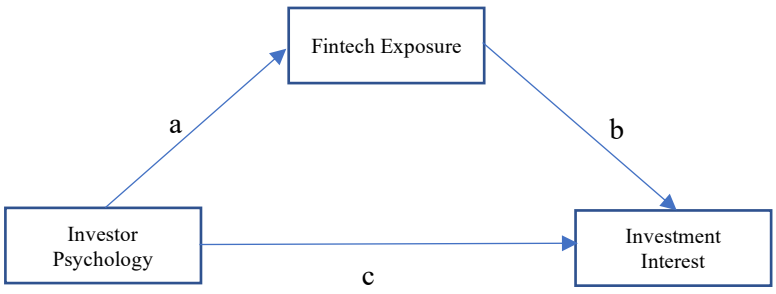

Figure 2: Fintech exposure as a mediator for the relationship between investors' psychology and investment interest

Table 4: Impact of investors' psychology and Fintech Exposure on Investment interest

Dependent Variable	Predictor	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	R	R^2	F	Sig
		B	Std. Error	Beta						
Investment Interest	Investor Psychology	0.44	0.02	0.72	23.06	0.01	0.72	0.51	531.91	0.01
Fintech Exposure	Investor Psychology	0.39	0.02	0.62	17.77	0.01	0.62	0.39	315.92	0.01
Investment Interest	Fintech Exposure	0.70	0.03	0.71	22.45	0.01	0.71	0.50	503.95	0.01

The outcomes of this study reveal a strong, statistically significant association between investor psychology and investment interest ($\beta = 0.72$, $p < 0.01$), as well as amongst investor psychology and fintech exposure ($\beta = 0.62$, $p < 0.01$). Likewise, fintech exposure also extensively predicts investment interest ($\beta = 0.71$, $p < 0.01$), indicating its prospective mediating role.

The statistics given in the Table 5 shows that investor psychology is a significant predictor of investment decision-making, it has a positive and significant on the investment decision-making (B = 0.43, t = 21.13, Sig. 0.01 levels). Moreover, investors' psychology has positive and significant impact on the fintech exposure (B = 0.39, t = 17.77, Sig. 0.01 levels). Additionally, the Fintech exposure has positive and significant impact on the investment decision-making (B = 0.65, t = 18.63, Sig. 0.01 levels). The Sobel test score was observed 12.85, $p<0.01$. The test score shows that the fintech exposure significantly mediates the relationship between investor psychology and investment decision-making (see Figure 2).

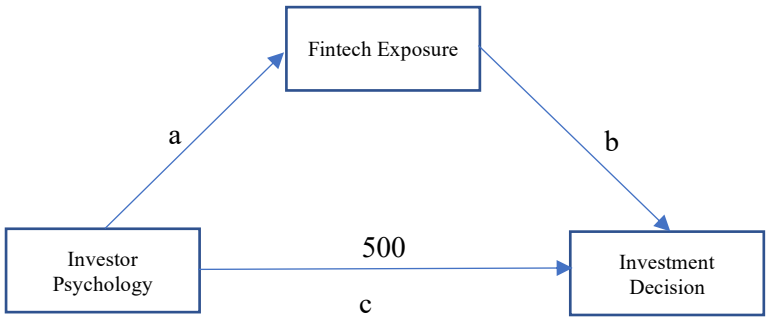

Figure 3: Fintech exposure as a mediator for the relationship between investors' psychology and investment decision-making

Table 5: Impact of investors' psychology and Fintech Exposure on Investment Decision-making										
Dependent Variable	**Predictor**	**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**	**R**	**R^2**	**F**	**Sig**
		B	**Std. Error**	**Beta**						
Investment Decision Making	Investor Psychology	0.43	0.02	0.69	21.13	0.01	0.69	0.47	446.43	0.01
Fintech Exposure	Investor Psychology	0.39	0.02	0.62	17.77	0.01	0.62	0.39	315.92	0.01
Investment Decision Making	Fintech Exposure	0.65	0.04	0.64	18.63	0.01	0.64	0.41	347.03	0.01

The current results reveal a noteworthy influence of investor psychology on investment decision-making ($\beta = 0.69$, $p < 0.01$), strengthening the view that investor psychology—such as confidence, risk tolerance, and behavioral biases—shape investment choices. Corresponding to Hayat and Anwar (2016), behavioral biases play a desperate role in investment behavior. Besides, fintech disclosure was understood to be significantly affected by investor psychology ($\beta = 0.62$, $p < 0.01$) and, in turn, suggestively predicted investment decision-making ($\beta = 0.64$, $p < 0.01$), representing its interceding role.

Discussion:

The present study examined how investors' psychology, fintech exposure, and investment behaviors interact within the Omani context. The correlation analysis indicated strong, positive associations among investor psychology, fintech exposure, and investment outcomes. These findings suggest that respondents with more favorable psychological orientations, such as confidence and risk tolerance, are more likely to possess greater exposure to digital financial tools and exhibit higher investment motivation. These results reinforce prior behavioral finance research showing that psychological factors often outweigh objective financial information in shaping financial behavior (Hayat & Anwar, 2016; Aren & Aydemir, 2015). Regression analyses further confirm that investor psychology significantly predicts investment interest and decision-making. These findings align with studies that highlight the central role of behavioral traits in driving financial choices (Adaramola et al., 2022).

A notable finding of this study is the demonstration of the mediating role of FinTech exposure. The Sobel test confirms that fintech engagement mediates the relationship between psychological predispositions and both investment interest and decisions. This suggests that psychologically predisposed individuals tend to explore digital tools, which then facilitates greater investment engagement. This finding aligns with Alaaraj and Bakri (2020), who argued that digital platforms enhance investor confidence by improving access to information and reducing informational asymmetries, consistent with the work of Healy and Palepu (2001).

In Oman's sociocultural setting, when fintech platforms provide system reliability, regulatory assurances, and culturally aligned user experiences, cognitive load decreases and adoption increases. This aligns with findings that trust mediates digital financial engagement (Gefen, 2000). FinTech tools appear to bridge psychological readiness with accessible, technology-mediated investment solutions.

Younger and more digitally literate populations in Oman exhibit higher openness to FinTech, whereas older or more conservative groups rely more heavily on trust, clarity, and institutional assurance. Cultural factors such as preference for familiar tools, reliance on personal networks, and expectations for regulatory oversight shape risk perception and influence the willingness to adopt digital investment platforms. This underscores the need to contextualize psychological and technological influences within local norms, regulatory practices, and linguistic expectations.

The findings align with regional studies in the GCC region showing that trust, usability, and perceived value shape fintech adoption more strongly than purely economic considerations (e.g., Alaaraj & Bakri, 2020). However, unlike many regional models that treat fintech readiness as an external predictor, the present study shows that fintech exposure mediates psychological influences. This unique contribution of the present study suggests that technology serves as a bridge between cognitive predispositions and actual behavior in developing digital markets.

The observed relationships can also be attributed to known behavioral biases. Overconfidence, loss aversion, anchoring, and status quo biases likely play a role in shaping respondents' fintech engagement. Overconfident individuals are more inclined to explore digital platforms because they believe they can navigate new financial tools effectively, consistent with Barber and Odean's (2001) evidence that overconfidence increases trading activity. Conversely, loss-averse investors may hesitate to adopt digital tools unless platform design reduces ambiguity and enhances clarity. This aligns with Thaler and Sunstein's (2009) argument that choice architecture can lower perceived risk and support better decisions. Interface design elements such as simplified navigation, transparent disclosures, real-time feedback, and risk display tools play an important role in shaping user trust and cognitive comfort, echoing findings from neuromarketing and cognitive-behavioral studies showing how visual cues and interface structure influence risk perception and decision-making patterns (Kuhnen & Knutson, 2005).

Neurofinance literature provides additional explanatory power. Reward anticipation, linked to activation in the ventral striatum, increases propensity for investment when platforms provide positive

cues and performance feedback (Knutson et al., 2005). Loss aversion and uncertainty avoidance, associated with amygdala and insula activation, diminish when fintech interfaces present clear, structured information (Phelps et al., 2014). Cognitive control processes mediated by prefrontal cortex activity support more deliberate and rational financial choices, especially when investors are equipped with digital literacy tools and scenario-based features (Kober et al., 2010).

The findings offer several practical implications. Platform designers should prioritize transparency, clarity, and intuitive navigation to reduce uncertainty and mitigate loss aversion. Balanced reward cues can increase engagement without encouraging impulsive or overconfident decisions. Risk visualization tools, including simulations or volatility indicators, can help investors cognitively process uncertainty. Embedded financial literacy modules—such as micro-lessons integrated into platform features—may enhance reflective decision-making while reducing susceptibility to anchoring or status quo biases. However, these interventions must be culturally aligned. For Oman, this includes integrating Arabic-language support, culturally relevant investment examples, Sharia-compliant options where applicable, and full alignment with Central Bank of Oman regulations. Such alignment strengthens trust, which is essential in sociocultural environments where institutional credibility and personal security play central roles in technology adoption.

11. Limitations and Future Research

While this study offers novel insights into the interplay of investors' psychology, FinTech exposure, and investment behaviors within Oman, it has several limitations. The participants were primarily drawn from educated urban populations, and data was collected using a convenience sampling method. Consequently, the findings may not fully represent the broader Omani population, particularly individuals in rural areas or underrepresented demographic groups. While the sample provides preliminary insights, overrepresentation in certain regions may limit generalizability. Future studies should adopt **stratified or proportional sampling** to achieve broader national representation.

Additionally, the cross-sectional survey design restricts causal inference. Although mediation and regression analyses suggest relationships among psychological traits, FinTech exposure, and investment outcomes, temporal dynamics remain unexplored. Future research could adopt longitudinal designs to track changes in investor psychology, FinTech adoption, and investment behaviors over time, providing stronger evidence for causality.

The study also relied on self-reported measures, which may introduce biases such as social desirability and inaccurate reporting. Future research could incorporate physiological or biometric measures, such as EEG, eye-tracking, or heart rate variability, to objectively validate psychological and emotional states during investment decisions. Furthermore, AI-driven analytics can be leveraged to analyze large-scale behavioral data from FinTech platforms, while experimental or quasi-experimental designs could test the effects of interface design, reward cues, and embedded educational modules on decision-making. Finally, cross-cultural investigations examining the influence of sociocultural norms, regulatory frameworks, and digital literacy would enhance the generalizability of these findings beyond the Omani context.

12. Conclusion

Among individuals in Oman, this study explored the interrelationships between investor psychology, fintech exposure, interest in investing, and decision-making. The results indicate that investor psychology influences investment decisions as well as investment interest. With the continued digitization of the financial landscape, fintech exposure has emerged as a crucial mediating factor, bridging psychological inclinations with actual investment behavior. In addition to technological adoption, behavioral factors — such as confidence, risk perception, and cognitive biases — enhance or modulate investment outcomes.

As digital transformation in financial services is rapidly advancing in the Omani context, fintech platforms appear to enhance investor confidence and engagement as well as provide access to investment opportunities. Fintech tools provide individuals with better information, timely, and efficient decision-making options, particularly when paired with sound psychological and financial foundations.

According to these insights, it is important to develop policies and educational programs that promote both financial literacy and digital competency. By enhancing investor awareness of behavioral biases and promoting fintech effectively, a more rational and inclusive investment participation can be achieved. It would be helpful to explore generational or demographic differences in fintech adoption and psychological drivers in the future, adding more nuance to these relationships. Ultimately, the results of this study contribute to the growing body of knowledge highlighting how psychology, technology, and personal finance interact dynamically in emerging markets like Oman.

13. Unique Contributions of the Paper

A key contribution of this paper to the understanding of investment behavior in Oman is the finding that fintech exposure has a mediating effect on investor psychology and their investment decisions. It provides insights into how investor psychology interact with digital financial tools in Oman, a rapidly developing economy with a growing adoption of fintech. As a result of the findings, behavioral biases and fintech platforms influence emerging market investment behavior, adding to a growing body of literature.

14. Theoretical and Practical Implications

This study extends existing models of investor behavior by incorporating fintech exposure as a mediator between investor psychology and investment decisions. This contribution enriches behavioral finance literature, particularly in the context of digital transformation in financial markets, by providing empirical evidence that fintech tools enhance financial literacy and mitigate psychological biases, resulting in more informed investment choices. Specifically, this research validates the extension of behavioral finance frameworks by demonstrating that FinTech platforms act as a crucial intervening variable.

A practical takeaway from the paper is that policymakers, financial institutions, and fintech platforms in Oman should consider the psychological profiles of investors when designing digital financial services. The use of tailored educational programs and fintech tools can reduce cognitive biases, increase financial literacy, and increase informed investment participation. A growing digital economy suggests fintech exposure could enhance investment decision-making significantly.

Actionable steps:

In Short term FinTech Platforms should implement customized 'nudge' features to combat biases. Financial Institutions must run targeted campaigns on using FinTech features (e.g., risk tools). Regulators can mandate clear, simplified disclosure formats across FinTech products.

In Long run Policymakers must integrate digital financial literacy into the national curriculum.

The Central Bank should support a national cybersecurity infrastructure to foster trust in digital transactions.

This study provides a framework for promoting ethical marketing innovations and responsible FinTech deployment in emerging economies. By identifying psychological vulnerabilities, the findings enable companies to design services that mitigate harm and support sustainable financial inclusion. This contributes directly to the knowledge-based, diversified economy envisioned by Oman Vision 2040, ensuring the digital transformation is socially responsible.

Author contributions: Dr. Mohamed Zaheeruddin conceptualized the study by conducting the literature review, identifying the research gap, collecting data, and developing the conceptual framework. Dr. Suneel Kumar and Dr. T. Chandrabai provided expertise in statistical analysis and contributed to methodological and analytical aspects of the study. Dr. Muhammad Imthiyaz was responsible for grammatical editing and manuscript formatting. Dr. Vimal Kumar Agarwal and Dr. Sunder Rajan assisted in data collection and organized the findings into an analytical format.

DECLERATION of Conflict of Interest:

All authors declare that they have no conflicts of interest.

REFERENCES:

1. Adaramola, A. O., Kayode, P. A., Ogiamien, O. F., & Adewale, O. V. (2022). Behavioural finance: An exploratory review. J Econ Res Bus Adm, 14(4). https://doi.org/10.26577/be.2022.v142.i4.04
2. Al Hasani, M. (2015). Women's employment in Oman. https://www.researchgate.net/publication/307597934_WOMEN'S_EMPLOYMENT_IN_OMAN
3. Al-Mamari, E., Al-Mazroui, M., Al-Washahi, S., Al-Badwawi, F., Al-Saaidi, S., Al-Saidi, K., & Zaheeruddin, M. (2025). Behavioral factors influencing investment decisions of Omani working women in Batinah Region, Oman. Gradiva Rev J, 11(9), 135–144. https://gradivareview.com/wp-content/uploads/2025/09/11.GRJ8550.pdf
4. Alaaraj, H., & Bakri, A. (2020). The effect of financial literacy on investment decision making in Southern Lebanon. Int Bus Account Res J, 4(1), 37–43. https://www.semanticscholar.org/reader/e8755560502447109f6da959fb6183ee2822006f
5. Aren, S., & Aydemir, S. D. (2015). The moderation of financial literacy on the relationship between individual factors and risky investment intention. Int Bus Res, 8(6), 17–28. https://doi.org/10.5539/ibr.v8n6p17
6. Arner, D. W., Barberis, J., & Buckley, R. P. (2016). Fintech: Evolution and regulation. Georgetown J Int Law, 47(4), 1271–1320. https://doi.org/10.2139/ssrn.2676553
7. Baker, H. K., & Nofsinger, J. R. (2010). Behavioral finance: Investors, corporations, and markets. John Wiley & Sons. https://doi.org/10.1002/9781118258415
8. Baker, H. K., & Ricciardi, V. (2014). Investor behavior: The psychology of financial planning and investing. John Wiley & Sons. https://doi.org/10.1002/9781118813454

9. Baker, H. K., Kumar, S., & Goyal, N. (2019). Behavioral biases among individual equity investors: A review. J Behav Exp Finance, 22, 1–19. https://doi.org/10.1108/MF-01-2018-0003
10. Barber, B., & Odean, T. (2001). Boys will be boys: Gender, overconfidence, and common stock investment. The Quarterly Journal of Economics, 116(1), 261–292. https://doi.org/10.1162/003355301556400
11. Baron, R. M., & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. J Pers Soc Psychol, 51(6), 1173–1182. https://doi.org/10.1037/0022-3514.51.6.1173
12. Central Bank of Oman. (2021). Annual report 2021. https://cbo.gov.om/Pages/AnnualReport.aspx
13. Chen, H., & Volpe, R. P. (1998). An analysis of personal financial literacy among college students. Financ Serv Rev, 7(2), 107-128. https://doi.org/10.1016/S1057-0810(99)80006-7
14. Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. American Journal of Theoretical and Applied Statistics, 5(1), 1–4. https://doi.org/10.11648/j.ajtas.20160501.11
15. Gadasandula, K., James, A. L., Thadvuai, N. R., Balakrishnan, N., & Zaheeruddin, M. (2024). Behavioral finance in the context of India's gold market. Migr Lett, 21(S3), 1082–1097. https://doi.org/10.59670/ml.v20i9.6888
16. Gefen, D. (2000). E-commerce: The role of familiarity and trust. Omega, 28(6), 725–737. https://doi.org/10.1016/S0305-0483(00)00021-9
17. Gervais, M., & Odean, T. (2001). Learning to be overconfident. Rev Financ Stud, 14(1), 1–27. https://www.jstor.org/stable/2696755
18. Goldstein, I., Jiang, W., & Karolyi, G. A. (2019). To FinTech and beyond. Rev Financ Stud, 32(5), 1647–1671. https://doi.org/10.2139/ssrn.3328172
19. Hayat, A., & Anwar, M. (2016). Impact of behavioral biases on investment decision: Moderating role of financial literacy. SSRN. https://doi.org/10.2139/ssrn.2842502
20. Healy, P. M., & Palepu, K. G. (2001). Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. J Account Econ, 31(1–3), 405–440. https://doi.org/10.2139/ssrn.258514
21. Jaffer, D. S., Zaheeruddin, D. M., N, D. R., Sultana, D. F., Babu, D. G., & Kumar, M. P. S. (2025). Financial literacy and fintech exposure as determinants of investment decisions: The mediating role of investment interests – A study of individual investors in Hyderabad, India. Int J Account Econ Stud, 12(5), 542–549. https://doi.org/10.14419/87y3za88
22. Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. Econometrica, 47(2), 263–291. https://doi.org/10.2307/1914185
23. Kaiser, T., & Menkhoff, L. (2020). Does financial education impact financial literacy and financial behavior, and if so, when? World Bank Econ Rev, 34(3), 613–634. http://documents.worldbank.org/curated/en/144551502300810101
24. Klapper, L., Lusardi, A., & Panos, G. A. (2013). Financial literacy and its consequences: Evidence from Russia during the financial crisis. J Bank Finance, 37(10), 3904–3923. https://ideas.repec.org/a/eee/jbfina/v37y2013i10p3904-3923.html

25. Kline, R. B. (2016). Principles and practice of structural equation modeling (4th ed.). Guilford Press. https://dl.icdst.org/pdfs/files4/befc0f8521c770249dd18726a917cf90.pdf
26. Knutson, B., Taylor, J., Kaufman, M., Peterson, R., & Glover, G. (2005). Distributed neural representation of expected value. Journal of Neuroscience, 25(19), 4806–4812. https://doi.org/10.1523/JNEUROSCI.0642-05.2005
27. Kober, H., Mende-Siedlecki, P., Kross, E. F., Weber, J., Mischel, W., Hart, C. L., & Ochsner, K. N. (2010). Prefrontal–striatal pathway underlies cognitive regulation of craving. Proceedings of the National Academy of Sciences, 107(33), 14811-14816. https://doi.org/10.1073/pnas.1007779107
28. Kuhnen, C. M., & Knutson, B. (2005). The neural basis of financial risk-taking. Neuron, 47(5), 763–770. https://doi.org/10.1016/j.neuron.2005.08.008
29. Mirzaei, M., & Buer, T. (2022). First results on financial literacy in Oman. Manag Finance, 48(1), 1–14. https://doi.org/10.1108/MF-09-2021-0456
30. National Centre for Statistics and Information. (2018). Survey on Omani attitudes towards savingandinvestment.NCSI.https://www.ncsi.gov.om/Elibrary/Pages/LibraryContentDetails.aspx?ItemID=xnoDRWSUqOVVN%2fH%2bfhhmcQ%3d%3d
31. Neiheisel, J. (2017). Sobel test. In M. Allen (Ed.), The SAGE encyclopedia of communication research methods (Vol. 4, pp. 1617–1618). SAGE Publications. https://doi.org/10.4135/9781483381411
32. Peón, D., & Antelo, M. (2021). The effect of behavioral biases on financial decisions. Rev Estrategia Organ, 10(2). https://doi.org/10.22490/25392786.4963
33. Phelps, E. A., Lempert, K. M., & Sokol-Hessner, P. (2014). Emotion and decision making: Multiple modulatory neural circuits. Annual Review of Neuroscience, 37, 263–287. https://doi.org/10.1146/annurev-neuro-071013-014119
34. Potrich, A. C. G., Vieira, K. M., & Mendes-Da-Silva, W. (2016). Development of a financial literacy model for university students. Manag Res Rev, 39(3), 356–375. https://doi.org/10.1108/MRR-06-2014-0143
35. Thaler, R. H., & Sunstein, C. R. (2009). Nudge: Improving decisions about health, wealth, and happiness. Penguin. https://www.researchgate.net/publication/235413094_NUDGE_Improving_Decisions_About_Health_Wealth_and_Happiness
36. Van Rooij, M., Lusardi, A., & Alessie, R. (2011). Financial literacy and stock market participation. J Financ Econ, 101(2), 449–472. https://www.sciencedirect.com/science/article/abs/pii/S0304405X11000717
37. Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2021). User acceptance of information technology: Toward a unified view. MIS Q, 27(3), 425–478. https://ssrn.com/abstract=3375136
38. Zaheeruddin, M., Fareed, M. O., Ansari, S. D., Jaffer, S., & Sultana, K. (2025). Harnessing social bonds for sustainable finance: A focus on challenges and prospects in the Sultanate of Oman. Gradiva Rev J, 11(5), 1–12. https://zenodo.org/records/15318776

39. Zaheeruddin, M., & Kumar, S. (2025). The interplay of investor psychology, accounting information, and fintech in shaping investment decisions: Evidence from Oman. Bangladesh J Multidiscip Sci Res. https://doi.org/10.46281/bjmsr.v10i2.2306