Factors Influencing the Investment Intentions of Millennials in an Emerging Economy: The Impact of Financial Advertising Using PLS-SEM Evidence from Pakistan

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ABSTRACT: There are a number of challenges and risks in the financial sector of Pakistan as it is an inherently risky and volatile industry, especially for new investors to make financial decisions. Access to information is a key factor in dealing with these challenges. This study explores the relationship between financial advertisements and investors' behavioural intentions, mediated by perceived risk. This study helps to validate the conceptual model based on the Stimulus-Organism-Response (SOR) model, and discuss the relationships between the financial advertisement antecedents (information quality, involvement, credibility and truthfulness) and perceived risk and investors' investment intentions. Using partial least squares structural equation modeling (PLS-SEM), data were collected from 307 respondents and analyzed. The study verifies that there are significant relationships between the information quality and truthfulness of financial advertisements and perceived risk. Credibility, and truthfulness, is also determined to be highly correlated with investor intentions. The findings show that five of the nine hypotheses are accepted, and that information quality and information truths negatively affect perceived risk, and information quality, credibility and information truths have a positive effect on intention to invest. This research helps advance the knowledge of the decision-making process of millennial investors in the presence of varying financial promotions and advertisements. The results are useful to policy makers for the development of financial advertising policies or for identifying those disclosures that are especially crucial.

KEYWORDS: Financial Investment, Investment Intention, Perceived Risk, Truthfulness, Millennials, Pakistan

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Introduction

The generation born between 1981 and 1996 is known as the millennial generation, and constitutes a large portion of the world's population and is becoming a major player in the international economy. The past few years have seen a significant increase in the number of millennials entering the workforce and tidying up their disposable income in the emerging economies. Financial institutions, policymakers and marketers all need to understand their intentions and behaviors when investing in order to be able to sell the right product to the right person. By making smart investments that can yield cash flow and valuable investment experience, millennials have the potential to improve their own financial development as well as economic development in general.

Investment is one of the main factors that contribute to growth, allowing businesses to grow, innovate, and generate employment. Investments are an avenue for providing capital for productive expansion. The economies of emerging countries have grown substantially during the last decades, and for the coming decades it is projected that they will continue their economic development. However, Dogra and Sharma (2019) stated that managers have to identify the critical advertisements of financial products and services so as to reach the target groups effectively. One challenge that marketers constantly have is understanding consumers' investment intentions and making sales forecasts and marketing decisions that are geared to the promotion of investment intentions.

Millennials are a large part of a nation's economic base, particularly in developing nations. They represent the group that joins the labor force and brings together wealth, thereby enabling them to play an important role in shaping significant economic growth and development. There are a few intriguing opportunities and challenges that they might have that could impact their investment choices. Financial ads are an essential source of information for millennials on finance products and services. It was proved by Abu Daqar et al. (2021) that millennials are one of the most technologically savvy generations and are able to access digital services like electronic and mobile banking because of their tech-savvy nature. As a result, financial technology, finance experts, finance institutions, banks and others are focusing on financial innovations. Hence, finance experts, financial institutions, banks and others are turning their focus to financial innovations.

Providers need to understand millennials' perspectives and needs on digitised financial services and offer modern services that are based on the state of the art advanced technologies.

Financial advertising is one way that financial institutions use to advertise financial products and services. Financial ads aimed at millennials should raise awareness and prompt investment in financial products and services. Opening bank accounts, investing in mutual funds, fixed deposits, stocks and bonds, and purchasing insurance policies represent some ways individuals can take investing initiatives. Financial advertisements are typically rational advertisements designed to inform and persuade. Arora et al. (2020) stated that social media platforms help companies design their advertisements; likewise, financial institutions can share advertisements of financial products and services on social media to attract millennials and other demographics.

The relationship between advertisement characteristics and investment behavior is complex. Information quality and perceived risk are inversely related because informed customers can better manage risks. Montecchi et al. (2019) stated that consumers can perceive risk if information is hidden in products and services. Financial products/services involvement is a risk control and intention to invest measure. According to Hussain et al. (2020), advertisement credibility is the perception and perspective of truth in advertisements by consumers. The level of credibility can reduce financial services and products risk in the ads and increase the intention of investment in the consumers' minds at a time of high trustworthiness. Truthfulness puts authenticity in advertising to consumers, helping them to take a step closer to investments. Venturini and Mehmetoglu (2019) have found that brand recall relies upon truthfulness.

Problem Statement

The millennials in emerging economies, such as in Pakistan, are an important demographic that can contribute significantly to the growth of the nation's economy. This cohort will become part of the labor market and will accumulate savings, making it imperative for financial institutions and financial policymakers in Pakistan to understand their investment plans. In the Pakistani context, however, there is a significant gap in the study of the factors that motivate the investment intentions of the millennials, specifically with respect to the effect of financial advertisement.

Although the investment behaviour and attitudes of millennials in different countries have been studied, there is limited research on the investment intentions of millennials in Pakistan. The investment plans of Pakistan's millennials are influenced by social, economic and cultural factors, which can vary greatly from other nations. Hence, the drivers for intentions to invest in this particular group of people in the Pakistani setting need to be discussed. Besides, financial illiteracy and limited access to financial products and services are some of the challenges faced by the Pakistani millennials.

Financial advertising is playing an increasing role in influencing financial decisions, but financial advertising's effect on the investment intentions of Pakistani millennials is less researched. By shaping financial knowledge, attitude and perceptions of millennials, financial advertisements can influence their investment decisions and behaviors. This relationship is very important in shaping marketing strategies and policy interventions. Therefore, this study employs partial least squares structural equation modeling (PLS-SEM) to explore the impact of financial advertisements on the investment decisions of emerging economy millennials in Pakistan.

Research Objectives and Questions

The main purpose of this study is to investigate the effect of financial advertisement on the investment intention of millennials in an emerging economy using the PLS-SEM technique. Specifically, the study is trying to explore the relationship between financial advertisement characteristics (information quality, involvement, credibility, truthfulness) and perceived risk; to see the direct effect of financial advertisement characteristics on investment intention; and to see the mediating effect of perceived risk. What are the characteristics of financial advertisements? What factors make Pakistani millennials feel more at risk with these ads? How do the features of financial advertisements affect the intentions to invest directly? Are there any mediation effects between the advertisement characteristics and investment intention?

Significance and Organization

This study has many implications. It can help financial institutions, marketers, policymakers and the millennial population of emerging economies to understand the impact of financial ads on investment mood. This can result in better financial advertising, better financial education programs, and better financial decisions, which can all help to increase financial inclusion and economic growth. The paper is divided into the following sections: literature review, hypothesis formulation, methodology, results, and summary and conclusion.

Literature Review

Theoretical Background

The Stimulus-Organism-Response (SOR) Model is used, and the relationship between financial advertisement antecedents, perceived risk and the intention of investors investing in financial advertisements is discussed. This is the SOR model, which is commonly used to explain the relationship between the environmental stimulus, the organism and the behavioural response (Wu & Li, 2018). This theory was formulated by Mehrabian and Russell (1974), who suggested that environmental stimuli can affect an individual's state of internal change (organism), which in turn may affect the individual's response in some way. In the context of this study, financial advertisement characteristics serve as stimuli, perceived risk and investor attitudes represent the organism, and investment intention constitutes the behavioral response. Motivations influence the consumer's organs and ultimately influence their investment intentions and decision-making (Peng & Kim, 2014). Various previous studies have applied the SOR model to explain the effects of advertising on consumers' behavioral intentions. Based on the utility of previous literature and the relevance of SOR in investigating the relationship between external factors and consumer responses, the present study applied the SOR model to examine the influence of advertising on investors' investment behavior.

Hypotheses Development

Information Quality refers to the extent to which advertisements provide useful, relevant, and timely information to consumers. Well-organized information minimizes the perceived risk for investing (Wasiuzzaman, 2021). Available complete information plays a vital role in influencing consumers' decision-making for investment (Ghasemaghaei & Hassanein, 2016). When investors have access to comprehensive information, they are better equipped to evaluate investment opportunities and assess potential risks. Therefore, H1a proposes that Information Quality has a significant negative impact on perceived risk. Getting information before investing is necessary. Information Quality has a positive influence on investment intention (Sa'diyah & Pratika, 2022). Information significantly and positively affects investment intention (Poeteri et al., 2021). Therefore, H1b proposes that Information Quality has a significant positive impact on investment intention.

Involvement represents the personal relevance of an advertisement or product to the consumer. Tubastuvi et al. (2022) concluded that perceived risk affects millennials' investment motivation and intention. Poetri et al. (2023) stated that perceived risk plays a significant role in millennials' decision to invest, but their trust outweighs potential risks. The relationship between involvement and perceived risk is complex. Therefore, H2a proposes that Involvement has a significant impact on Perceived Risk. Investment intention is the definitive longing of advertisers to know about marketed items (Johnson et al., 2006). Katalbas et al. (2022) found that financial literacy enhances the effects of subjective norms on product involvement and investment intention. Therefore, H2b proposes that Involvement has a significant positive impact on Investment Intention.

Credibility refers to the believability and trustworthiness of the source and message of an advertisement. Technology-dependent services can have a higher perceived risk if the system fails (Liu et al., 2020). Credible advertisements are more likely to be accepted by consumers. Therefore, H3a proposes that Credibility has a significant negative impact on perceived risk. Credible advertisements build trust and confidence in consumers, making them more likely to develop positive behavioral intentions. Therefore, H3b proposes that Credibility has a significant positive impact on investment intention.

Truthfulness refers to the accuracy and authenticity of advertising claims (Wang & Li, 2020). Qalati et al. (2021) illustrated that the intensity of perceived risk on a consumer's investment intention minimizes when truthfulness in businesses maximizes. Truthful advertisements reduce uncertainty and skepticism. Therefore, H4a proposes that Truthfulness has a significant negative impact on perceived risk. Taejun et al. (2013) showed that investor behavior is positively influenced by revealing truthfulness and unbiased advertisements. Hence, the researchers proposed that the relationship between "Truthfulness" and "Investment intention" has a positive and significant impact on investment intention, as proposed by H4b.

Perceived Risk – uncertainty and possible negative consequences of a choice. Dogra et al. (2023) revealed that perceived risk and investment intention are negatively yet significantly associated with each other. Perceived risk can be an obstacle to investing positive intentions. Thus, H5 suggests that there is a significant negative relationship between perceived risk and Investment intentions.

Conceptual Framework

The conceptual framework between financial advertisement antecedents (Information Quality, Involvement, Credibility, Truthfulness), Perceived Risk and Investment Intention based on the SOR model and the hypotheses developed above is depicted below. It assumes that the characteristics of the advertisement act as stimuli and that this stimulation is responsible for the perceived risk and hence the intention to invest. Further, the framework depicts direct links from advertisement characteristics to investment intent.

Research Methodology

Research Design and Approach

The method of research used in this research is quantitative research with a purpose of explanatory research because the basis of this study is based on existing theories. The correlational research design is employed in testing the relationship between variables, which involves measuring the direction and strength of the relationship between variables without manipulating the variables (Anderson & Arsenault, 1998). This is a good design for investigating the relationship among the characteristics of the advertisements, perceived risk, and investment intention in the natural environment.

Sampling and Data Collection

There was no sampling method for the data collection; it was of the non-probability type known as convenience sampling, as per Dörnyei (2007), in which members of the target population who are convenient for the researcher to include in the sample are chosen. The target audience is people aged 27 to 42 years, the millennial generation in Pakistan. The sample size is 307, which exceeds the minimum requirements for PLS-SEM analysis and provides sufficient statistical power. A questionnaire using a 5-point Likert scale (strongly disagree to strongly agree) was used to collect data. To guarantee the validity and reliability of the questionnaire, it was adapted from established questionnaires. The purpose of the study was explained to all respondents, and their right to withdraw was given at any time. Anonymity and confidentiality of responses were ensured.

Statistical Techniques

This study uses Smart PLS software as well as the Statistical Package for the Social Sciences (SPSS). For descriptive analysis, SPSS is used, and for the analysis of Partial Least Squares-Structural Equation Modeling, Smart PLS (PLS-SEM) is used. PLS-SEM is a variance-based structural equation modeling method specially appropriate for exploratory studies and complex models involving multiple constructs with multiple indicators.

Data Analysis and Results

Descriptive Analysis

In this study, the bootstrapping of various samples is addressed as described in Hair et al. (2010) and Henseler et al. (2009). Tables 1, 2 and 3 give the demographic characteristics of the respondents.

Table 1

Gender Distribution

Gender	Frequency	Percent	Valid Percent	Cumulative Percent
Male	237	77.2	77.2	77.2
Female	70	22.8	22.8	100.0
Total	307	100.0	100.0	

Table 2

Age Distribution

Age Group	Frequency	Percent	Valid Percent	Cumulative Percent
27-30	175	57.0	57.0	57.0
31-36	67	21.8	21.8	78.8
37-42	65	21.2	21.2	100.0
Total	307	100.0	100.0	

Table 3

Marital Status Distribution

Marital Status	Frequency	Percent	Valid Percent	Cumulative Percent
Married	129	42.0	42.0	42.0
Unmarried	178	58.0	58.0	100.0
Total	307	100.0	100.0	

Out of 307 respondents, 237 are male (77.2%), and 70 are female (22.8%). The frequency of respondents aged 27-30 is 175 (57%), aged 31-36 is 67 (21.8%), and aged 37-42 is 65 (21.2%). As far as marital status is concerned, there are 129 married (42%) and 178 unmarried (58%). The demographic profile shows that the sample was mainly male, unmarried and that the majority of the participants were in the age group 27-30 years, a group that represents the young working class in urban Pakistan.

Measurement Model

The measurement model is used to investigate the relationship between latent variables and how they are measured. The purpose of this is to test the competency of the model using the following tests: reliability test, convergent validity test, and discriminant validity test (Hair et al., 2010; Hair et al., 2012).

Convergent Validity

Convergent validity is a measure of the correlation between measures of the same construct. Results from Cronbach's alpha, Composite reliability and Average Variance Extracted (AVE) are included in Table 2.

Table 4

Convergent Validity Results

Construct	Items	Loadings	Cronbach's Alpha	Composite Reliability	AVE
Credibility	CRE1	0.886	0.910	0.937	0.788
	CRE2	0.909			
	CRE3	0.908			
	CRE4	0.846			
Investment Intention	II1	0.928	0.891	0.933	0.822
	II2	0.908			
	II3	0.883			
Information Quality	IQ1	0.917	0.929	0.949	0.824
	IQ2	0.905			
	IQ3	0.917			
	IQ4	0.892			

Construct	Items	Loadings	Cronbach's Alpha	Composite Reliability	AVE
Involvement	INV1	0.907	0.909	0.936	0.786
	INV2	0.917			
	INV3	0.865			
	INV4	0.855			
Perceived Risk	PER1	0.799	0.370	0.670	0.651
	PER2	0.839			
	PER3	0.816			
	PER4	-0.773			
Truthful	TRU1	0.838	0.301	0.423	0.606
	TRU2	0.862			
	TRU3	0.835			
	TRU4	-0.653			
	TRU5	-0.681			

All values of Cronbach's alpha, except Perceived Risk and Truthful, are greater than 0.7, fulfilling the required level of reliability (Nunnally & Bernstein, 1994). All the values of composite reliability scores are above 0.7, with the exception of the composite reliability score for the item “Truthful.” Average Variance Extracted (AVE) values are > 0.5 (Fornell & Larcker, 1981), which indicates convergent validity. The Cronbach's alpha values for the Perceived Risk and Truthful were low, which may indicate poor internal consistency. The convergent validities, however, are greater than 0.5, suggesting acceptable convergent validity.

Discriminant Validity

Discriminant validity of the model is evaluated by usingthe Fornell and Larcker criterion and the Heterotrait-Monotrait ratio of correlations (HTMT) tests.

Table 5

Fornell-Larcker Criterion

	CRE	IQ	II	INV	PER	TRU
Credibility	0.888					
Information Quality	0.755	0.908				
Investment Intention	0.793	0.832	0.907			
Involvement	0.801	0.850	0.799	0.886		
Perceived Risk	-0.578	-0.671	-0.643	-0.624	0.807	
Truthful	0.763	0.771	0.774	0.782	-0.722	0.779

Note: Diagonal values represent the square root of AVE; off-diagonal values represent correlations.

According to Fornell and Larcker (1,981), all diagonal values should be higher than non-diagonal values. This satisfies their requirements, confirming discriminant validity.

Table 4

Heterotrait-Monotrait Ratio (HTMT)

	CRE	IQ	II	INV	PER	TRU
Credibility						
Information Quality	0.821					
Investment Intention	0.880	0.913				
Involvement	0.880	0.925	0.885			
Perceived Risk	0.614	0.706	0.694	0.654		
Truthful	0.844	0.846	0.869	0.865	0.849	

Table 4 shows that all values except 2 are less than 0.9, which satisfies the requirements suggested by Henseler et al. (.2015). Since the measurement model has verified convergent and discriminant validity, we now move to the structural model.

Structural Model

Through hypothesis testing, the structural model determines the relationships between variables. The average significance level of the p-value is considered to be 5% or 0.05.

Table 5

Results of Path Analysis

Hypothesis	Path	β-Coefficient	P-Value	Remarks
H1a	IQ → PER	-0.316	0.001	Supported
H1b	IQ → II	0.412	0.000	Supported
H2a	INV → PER	0.022	0.821	Not Supported
H2b	INV → II	0.092	0.245	Not Supported
H3a	CRE → PER	0.049	0.533	Not Supported
H3b	CRE → II	0.276	0.001	Supported
H4a	TRU → PER	-0.533	0.000	Supported
H4b	TRU → II	0.173	0.042	Supported
H5	PER → II	-0.055	0.298	Not Supported

Note: IQ = Information Quality, INV = Involvement, CRE = Credibility, TRU = Truthful, PER = Perceived Risk, II = Investment Intention

Out of 9 hypotheses, 5 are accepted (H1a, H1b, H3b, H4a, H4b) and 4 are rejected (H2a, H2b, H3a, H5). H1a and H4a have a negative impact, while H1b, H3b, and H4b have a positive impact.

Information Quality ($\beta = -0.316$, $p < 0.001$) and Truthful ($\beta = -0.533$, $p < 0.000$) display a statistically significant relationship with the investor's perceived risk. This explains that the information presented may not instill trust in customers and raises suspicion about its accuracy. The results confirm hypotheses H1a and H4a.

The results indicate that Information Quality ($\beta = 0.412$, $p < 0.000$), Truthfulness ($\beta = 0.173$, $p < 0.042$), and Credibility ($\beta = 0.276$, $p < 0.001$) significantly influence investor investment intention. Consequently, hypotheses H1b, H3b, and H4b are supported.

The study finds that there is no statistically significant relation between perceived risk and intentions of investors ($\beta = -0.055$, $p < 0.298$), thus rejecting H5. The R^2 values are 0.56 for Perceived Risk and 0.74 for Investment Intention, which shows considerable explanatory power.

Discussion and Conclusion

Discussion of Findings

The aim of this research was to analyse the factors that motivate Pakistani millennials to invest and the impact of financial advertisements. The findings show that there is a significant relationship between Information Quality, Truthfulness and the perceived risk by an Investor. The negative relationships mean that when investors think that information is incomplete or misleading, they feel more risk. This is consistent with previous studies by Waheed et al. (2020) and Wasiuzzaman (2021), which suggested that perceived risk is reduced when information is well organized.

The results also show that the factors of Truthfulness, Information Quality and Credibility have a significant effect on an investor's investment intention. These findings indicate that if financial advertisements are seen as informative, truthful, and credible, then millennials will be more inclined to have positive intentions when it comes to investing. The results are in line with those of Sa'diyah and Pratika (2022) and Hasan et al. (2023).

Interestingly, the study does not find any non-significant relationship between perceived risk and investors' intentions (H5 is rejected). The same results were found by Yanuar and Arifin (2022), who stated that financial risk has no effect on the investment plans of millennials who invest in mutual funds. This indicates that Pakistani millennials might either have become accustomed to risk-taking or likely don't consider financial risk from ads to be a deterrent to investing.

The non-significant relationships between Involvement and Perceived Risk (H2a) and Involvement and Investment Intention (H2b) indicate that just being involved with financial advertisements doesn't necessarily mean that perceived risk decreases or that the investment intention increases. Likewise, for Hypothesis 3a, the non-significant results between Credibility and Perceived Risk suggest that the effect of Credibility on Investment Intention is direct but not necessarily abates perceived risk. This implies that perceived risk can be affected more by information quality and truthfulness than by source credibility.

Theoretical Contributions

This study makes several theoretical contributions. First, it extends the application of the Stimulus-Organism-Response framework to the context of financial advertisements and investment intentions in an emerging economy. Second, the study identifies the differential effects of advertisement attributes on perceived risk and investment intention. Information quality and truthfulness are more influential in reducing perceived risk than involvement or credibility. Third, by focusing on Pakistani millennials, the study contributes to the limited literature on financial behavior in emerging economies. Fourth, the non-significant relationship between perceived risk and investment intention challenges conventional assumptions about the role of risk in investment decisions.

Managerial Implications

The study findings enhance understanding of the relationships among the backgrounds and perception of investment intention. The study confirms that truthfulness and information quality are significantly related to perceived risk, while information quality, credibility, and truthfulness are significantly related to investment intention. Through this study, managers should gain an understanding of how to gain viewers' trust. By showing credible and truthful information, there would be less chance of customers getting confused. Banks should focus on informing customers about financial concepts. Financial institutions should ensure that advertisements provide comprehensive, relevant, and useful information about products and services. The advertisements must be crafted to establish credibility by using error-free messages, endorsement by experts, and clear communication. To gain consumer trust and alleviate the perceived risk, honest advertising is vital. Financial institutions should not make any exaggerated or inaccurate statements.

Limitations and Future Recommendations

There are some limitations to this study. Data collection has only been undertaken in Karachi (Pakistan). The culture of Pakistan is diverse, and it influences the investors' investment behaviour. Data from other areas in the country should be included in future studies. A comparative study can be done to appraise the effect of marketing communication between rural cities and urban cities. The study has considered the effect of financial advertisement only on investment products but has left out different banking sectors. The cross-sectional design prevents the determination of causal relationships. Longitudinal designs could be used in future studies. Both Perceived Risk and Truthful have low Cronbach's alpha values, which indicates a possible lack of internal consistency. Future research should be conducted to further refine the measures of these constructs.

Conclusion

This study explored the factors that influence the intent to invest in Pakistani Millennials and the impact of financial advertisements. The findings indicated that there was a significant correlation between Information Quality and Truthfulness with the investor's perceived risk. The results also show that three variables, namely "Truthfulness", "Information Quality" and "Credibility", significantly affect an investor's investment intention. The study also finds a non-significant relationship between perceived risk and investors' intention. The results confirmed that five hypotheses are accepted and four hypotheses are rejected. The study is a valuable addition to the increasing number of studies in the field of financial behavior among millennials in emerging economies. The study uses the SOR framework to offer a thorough understanding of the effect of the characteristics of the advertisement on cognitive and affective responses, which in turn affect behavioral intentions. The results have significant financial implications for financial institutions, policymakers and marketers interested in understanding and shaping the investment behavior of millennials.

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