


EXAMINING THE RELATIONSHIP BETWEEN FINANCIAL KNOWLEDGE, RISK TOLERANCE, AND PAST BEHAVIOURAL BIAS ON INVESTORS ACTUAL INVESTMENT BEHAVIOR

Yuvaraj D^A, Pulidindi Venugopal^B



ARTICLE INFO	ABSTRACT
<p>Article history:</p> <p>Received 20 February 2023</p> <p>Accepted 22 May 2023</p>	<p>Purpose: The present study aims to determine the factors influencing investment intention and actual investment behaviour in mutual funds. The study uses financial knowledge and risk tolerance as moderators and past behavioral bias as a mediator.</p> <p>Theoretical framework: The Theory of Planned Behaviour (TPB) appears to have become a very useful model for predicting various investing behaviours. Therefore, the present utilises the TPB model to analyse mutual fund investment behaviour.</p> <p>Design/methodology/approach: The convenience sampling method was used to collect respondents from a population of 582 retail investors through questionnaire survey This research used partial least squares structural equation modelling (PLS-SEM) as the main method of data analysis using SmartPLS 4.</p> <p>Findings: Attitude, financial knowledge, and risk tolerance emerged as the most important determinants of mutual fund investment intention. This highlights the significance of creating favorable conditions in terms of accessibility, which may encourage and ease the decision of investors to purchase mutual funds.</p> <p>Research, Practical & Social implications: Marketers can explain how their mutual fund offerings would help both the market and investors. Marketers should prioritize proper communication about the benefits of mutual funds to investors, as communication is regarded as a critical tool for the success of mutual fund products.</p> <p>Originality/value: To understand individual investors' intentions to engage in mutual funds, the impact of attitude, subjective norms, and perceived behavioural control on investor intentions and, actual investment behaviour were hypothesised and analysed, financial knowledge and risk tolerance functioning as moderators. Additionally, past behavioural bias is a mediator.</p>
<p>Keywords:</p> <p>Actual Investment Behaviour; Investment Intention; Financial Knowledge; Mutual Fund; Past Behavioral Bias; Theory of Planned Behavior.</p> <div data-bbox="172 1055 480 1301" style="text-align: center;">  </div>	<p>Doi: https://doi.org/10.26668/businessreview/2023.v8i6.2333</p>

EXAME DA RELAÇÃO ENTRE O CONHECIMENTO FINANCEIRO, A TOLERÂNCIA AO RISCO E O VIÉS COMPORTAMENTAL ANTERIOR SOBRE O COMPORTAMENTO REAL DE INVESTIMENTO DOS INVESTIDORES

RESUMO

Objetivo: O presente estudo tem como objetivo determinar os fatores que influenciam a intenção de investimento e o comportamento real de investimento em fundos mútuos. O estudo usa o conhecimento financeiro e a tolerância ao risco como moderadores e o viés comportamental passado como mediador.

Estrutura teórica: A Teoria do Comportamento Planejado (TPB) parece ter se tornado um modelo muito útil para prever vários comportamentos de investimento. Portanto, o presente trabalho utiliza o modelo TPB para analisar o comportamento de investimento em fundos mútuos.

^A Ph.D. VIT Business School. Vellore Institute of Technology. Vellore, Tamil Nadu, India.

E-mail: hd.yuvaraj@gmail.com Orcid: <https://orcid.org/0000-0001-8407-5867>

^B Ph.D. VIT Business School. Vellore Institute of Technology. Vellore, Tamil Nadu, India.

E-mail: pulidindi.venu@vit.ac.in Orcid: <https://orcid.org/0000-0003-0880-7565>

Projeto/metodologia/abordagem: O método de amostragem por conveniência foi usado para coletar respondentes de uma população de 582 investidores de varejo por meio de uma pesquisa por questionário. Essa pesquisa usou a modelagem de equações estruturais por mínimos quadrados parciais (PLS-SEM) como o principal método de análise de dados usando o SmartPLS 4.

Resultados: A atitude, o conhecimento financeiro e a tolerância ao risco surgiram como os determinantes mais importantes da intenção de investimento em fundos mútuos. Isso destaca a importância de criar condições favoráveis em termos de acessibilidade, o que pode incentivar e facilitar a decisão dos investidores de comprar fundos mútuos.

Implicações sociais, práticas e de pesquisa: Os profissionais de marketing podem explicar como suas ofertas de fundos mútuos ajudariam tanto o mercado quanto os investidores. Os profissionais de marketing devem priorizar a comunicação adequada sobre os benefícios dos fundos mútuos para os investidores, pois a comunicação é considerada uma ferramenta essencial para o sucesso dos produtos de fundos mútuos.

Originalidade/valor: Para entender as intenções dos investidores individuais de se envolverem em fundos mútuos, foi levantada a hipótese e analisado o impacto da atitude, das normas subjetivas e do controle comportamental percebido sobre as intenções do investidor e o comportamento real de investimento, tendo o conhecimento financeiro e a tolerância ao risco como moderadores. Além disso, o viés comportamental passado é um mediador.

Palavras-chave: Comportamento Real de Investimento, Intenção de Investimento, Conhecimento Financeiro, Fundo Mútuo, Viés Comportamental Passado, Teoria do Comportamento Planejado.

EXAMEN DE LA RELACIÓN ENTRE LOS CONOCIMIENTOS FINANCIEROS, LA TOLERANCIA AL RIESGO Y EL SESGO CONDUCTUAL PREVIO SOBRE LA CONDUCTA INVERSORA REAL DE LOS INVERSORES

RESUMEN

Objetivo: El presente estudio pretende determinar los factores que influyen en la intención de invertir y en el comportamiento inversor real en fondos de inversión. El estudio utiliza el conocimiento financiero y la tolerancia al riesgo como moderadores y el sesgo conductual previo como mediador.

Marco teórico: La Teoría del Comportamiento Planificado (TPB) parece haberse convertido en un modelo muy útil para predecir diversos comportamientos de inversión. Por lo tanto, el presente trabajo utiliza el modelo TPB para analizar el comportamiento inversor en fondos de inversión.

Diseño/metodología/enfoque: Se utilizó el método de muestreo por conveniencia para recoger encuestados de una población de 582 inversores minoristas mediante una encuesta por cuestionario. Esta investigación utilizó el modelo de ecuaciones estructurales por mínimos cuadrados parciales (PLS-SEM) como método principal de análisis de datos mediante SmartPLS 4.

Resultados: La actitud, los conocimientos financieros y la tolerancia al riesgo surgieron como los determinantes más importantes de la intención de inversión en fondos de inversión. Esto pone de relieve la importancia de crear condiciones favorables en términos de accesibilidad, que puedan fomentar y facilitar la decisión de los inversores de comprar fondos de inversión.

Implicaciones sociales, prácticas y de investigación: Los profesionales del marketing pueden explicar cómo sus ofertas de fondos de inversión ayudarían tanto al mercado como a los inversores. Los comercializadores deben dar prioridad a una comunicación adecuada sobre los beneficios de los fondos de inversión a los inversores, ya que la comunicación se considera una herramienta esencial para el éxito de los productos de fondos de inversión.

Originalidad/valor: Para comprender las intenciones de los inversores individuales de participar en fondos de inversión, se hipotetizó y analizó el impacto de la actitud, las normas subjetivas y el control conductual percibido sobre las intenciones de los inversores y el comportamiento de inversión real, con el conocimiento financiero y la tolerancia al riesgo como moderadores. Además, el sesgo conductual pasado es un mediador.

Palabras clave: Conducta de Inversión Real, Intención de Inversión, Conocimiento Financiero, Fondo de Inversión, Sesgo Conductual Pasado, Teoría de la Conducta Planificada.

INTRODUCTION

Mutual funds are one of the most common investment strategies today. Many investors are interested in mutual funds because they offer several benefits, including professional management, high liquidity, diversification, and a low minimum cash requirement. The most critical thing is deciding how to find a suitable investment fund to complement one's profits. (Haslem, 2009; Kaur & Bharucha, 2021). Mutual fund companies have spent a significant amount of money advertising and promoting their current and new schemes. As a result, the successful promotion of mutual fund schemes necessitates a thorough understanding of mutual fund investors' investing habits (Raut, 2020). Purchase intentions for mutual fund products are likely to be influenced by marketing communication tools (Waqas et al. 2023). The Present levels of knowledge about the investing behaviours' of mutual fund investors are inadequate (Annamalah et al. 2019; Turtiainen et al., 2022).

Indian households have traditionally possessed a greater proportion of tangible assets, including real estate and valuable commodities like gold. Mutual funds in emerging markets have made it possible for more people to invest in capital markets and have helped to strengthen the securities and derivatives markets in these developing nations (Musthaq, 2021; Ong & Sy, 2004). It can be observed that there is a growing trend towards improving investments in financial assets from 24% in fiscal 2017 to 31% in fiscal 2022 (CRISIL, 2022). The proportion of individual investors in the Indian mutual fund market has been trending upward (Maheshwari and Pandey, 2021). As of January 2023, the total amount of assets under management by the mutual fund industry was Rs.39.62 trillion, which is equivalent to \$478.08 billion USD (IBEF, 2023).

Investors who are more knowledgeable about mutual funds are more likely to be self-motivated in their search for mutual fund information (Kaur, 2018). However, Nedumparambil & Bhandari (2022) identified that most Indian mutual fund investors are inexperienced and base their investments on superficial information. And also, when assessing alternative funds, Indian mutual fund investors prioritise returns adjusted for market or risk-free returns. The Theory of Planned Behaviour appears to have become a very useful model for predicting various investing behaviours. Previous researchers (Akhtar & Das 2019; Lai 2019; Raut 2020) explored stock market investment intention; Raza et al. (2020) discovered Islamic insurance intention; and Allah Pitchay et al. (2020) examined bank services intention.

Furthermore, the research sought to address a research gap by including a financial knowledge, risk tolerance, as a moderators and Past Behavioural Bias as mediating variables in

the antecedents of Theory planned behavior (TPB) and actual investment behavior as an extending variable for TPB in the context of Mutual Fund investment Intention. However, relatively limited study using the TPB has been undertaken in India to examine individuals' investment intentions toward mutual funds. Therefore, the present study aims to determine the factors influencing investment intention and actual investment behaviour in mutual funds, identify the moderation relationship of financial knowledge between attitude and investment intention, examine the moderate relationship between risk tolerance and investment intention towards actual investment behaviour, and explore the mediating relationship between past behavioural bias and investment intention towards actual investment behaviour.

The following sections are arranged in this article: The literature review and hypothesis are introduced in the second section. The data and methods are explained in the third part. The empirical outcomes are seen in the fourth section and the last section presents the conclusion and consequences of the study findings.

LITERATURE AND FORMULATION OF HYPOTHESES

This section concentrates on the significance of theoretical foundation and the development of hypotheses supported by previous studies.

The Importance of the Theory of Planned Behaviour in Investment Decision Making

The theory of planned behaviour (TPB) of Ajzen (1991), which was an extension of Ajzen and Fishbein (1975), can be used to interpret an individual's investing behaviour (TRA). Therefore, the present utilises the TPB model to analyse mutual fund investment behaviour. The results of an individual investor's investment, or how they perceive the advantages and risks of mutual funds in comparison to other investment opportunities, affects how exposed they are to them. The degree to which a person has a positive or negative assessment of the actions of others is referred to as attitude towards behaviour (ATT). Subjective norms (SN) are described as the perception of a social responsibility to do or not execute a behaviour, whereas perceived behavioural control (PBC) is the interpretation of the ease or difficulty of executing the behaviour based on the availability or lack of resources and opportunities.

Raut et al. (2018) observed that the TPB seems to be very applicable for evaluating investing behaviour in the form of the Indian stock market. Shanmugam and Ramya (2012) used TPB to investigate the effect of social factors on individual investors and concluded that social factors, namely social interactions and media, affect individual investors' trading.

Alleyne (2011) discovered that TPB facilitates explaining individual investment intentions. Ahmed et al. (2020) used the theory of planned behaviour to describe purchasing intention, arguing that their study results were sufficient. Furthermore, as stated earlier by Rehman et al. (2019); Mohan & Kinslin (2022), TPB theory has an important and optimistic impact on identifying customer buying intentions.

Attitude Towards Investment Intention

Attitude is a critical factor affecting a person's output in relation to a specific behavioural intention (Amin et al., 2017; Lajuni et al., 2017). An individual's attitude has a significant impact on his or her actions and intentions. It has been discovered that attitude has a positive and important effect on purchasing intent for capital investment (Echchabi, 2016). The findings of Azizam et al. (2020) revealed that attitude has the greatest impact on the desire to purchase insurance. Rahmani et al. (2023) discovered a significant positive relationship between attitude, awareness, and involvement in investment decisions and investment intention. Chen (2020) discovered that a consumer's attitude towards purchasing sustainability-labelled products has a substantial effect on their purchase intent. Andam & Osman (2019) observed that behavioural intention towards green investment has a direct and relevant positive association with attitude towards behaviour. However, Based on the concept of Ali et al. (2015); Kautsar et al. (2018), while buyers have a positive attitude, their intention to invest increases indirectly. Hence, the following hypothesis was tested to determine the impact of personal attitude on mutual fund investment intention:

H₁. Attitude is effectively related to the intention to invest in the mutual fund.

Subjective Norms on Investment Intention

Subjective norms are also a significant factor in determining investor intentions, indicating the significance of perceived external factors or stresses as well as the importance of peers' opinions (Raut, 2020). According to Raza et al. (2019), subjective norms have a positive and important effect on the purchasing intention of Islamic insurance. It also represents people's assumptions about how their comparison groups would view them if they participated in such actions. Subjective norms are made up of two parts that interact: trusting in others' assumptions, as others would prefer to function, and assessing each opinion negatively or positively. Hamilton & Terblanche-Smit (2018) have reported that consumer behaviour is influenced not only by their attitude towards alternative fuel vehicles but also by the social environment, which

would be more likely to be achieved by consumers who feel greater social pressure to buy alternative fuel vehicles. Aziz and Afaq (2018) discovered that subjective norms enhance people's intentions in Islamic banking and finance, as well as form positive intentions for people planning to use Islamic banking services. Subjective norms, according to Akmal et al. (2020), are an impact of the users' social environment on their use of online mutual fund portals, with other parties' approval. In their report, Raut and Das (2017) embrace subjective norms as a consideration that influences intention for online investment, and if investors believe that the majority of the people they deem relevant are using online trading, they will be adversely influenced by it. Pandey et al. (2022) have demonstrated that investors' subjective norms and perceived purchase risk influence their involvement in purchase decisions. As a result, the studies above indicate that subjective norms are a predictive factor that has a direct impact on customer intention. The proposed hypothesis is:

H₂: Subjective norms effectively relate to the intention to invest in the mutual fund.

Perceived Behavioural Control on Investment Intention

The third term is perceived behavioural control, which is defined as an individual's impression of ease or difficulty in executing a certain activity, i.e., the extent to which they believe the output or non-performance of both the conduct in question is under their wilful control (Ajzen 1985). Perceived behavioural control has also been shown to be a strong indicator of behavioural intent to engage in online stock trading. Individuals' intentions with regard to making socially responsible investments were significantly influenced by subjective norms and perceived behavioural control (Thanki et al. 2022). Perceived behavioural control not only affects motive but also has a strong impact on actual implementation (Raut & Das, 2017; Raut, Das, & Kumar, 2018). According to Shin et al. (2020), perceived behavioural control influences both intentions to purchase state-branded products and actual behaviour. Perceived behavioural control and green consumer identity were also significant predictors of purchase intentions, as said by Judge et al. (2019). Furthermore, Gao et al. (2017) reported that individuals with a positive attitude towards energy conservation in the working environment, high perceived behaviour control, and a good personal moral standard and descriptive norm are more essential in shaping the intention to conserve energy at work. The following hypothesis was tested to determine the effect of PBC on mutual fund investment intention:

H₃: Perceived behavioural control is effectively related to the intention to invest in the mutual fund.

Investment Intention and Actual Investment Behaviour

Juniwati (2014) Purchasing intention is defined as "an individual's willingness to complete the transaction with retailers". According to Pires et al. (2004), "whether the intended purchase was a good or a service and whether it was a high- or low-involvement item was correlated with differences in perceived risk". Kyto et al. (2019) confirmed that the purchaser's intention to buy, which is influenced by the purchaser's expectations and perceptions, is a significant factor in predicting actual purchase behaviour. Indiani & Fahik (2020) suggested that online retailers improve online transaction convenience in order to increase the conversion rate from purchase intention to actual purchase. The intention to purchase a particular product has a positive and significant influence on actual purchasing behaviour (Agmeka et al., 2019; Lee et al., 2022; Warganegara & Hendijani, 2022). Sourirajan and Perumandla (2022) confirmed that intentions to invest were largely motivated by goal-based desires, whereas actual investment behaviour was driven by habits. The studies above show that purchase intention predicts actual purchases. Thus, the proposed hypothesis is:

H₄: Mutual fund Investment intention influences actual investment behaviour.

Financial Knowledge Moderates the Relationship Between Attitude and Investment Intention

This study investigates the importance of financial knowledge as a moderator of consumers' purchasing intentions in relation to financial products. Financial knowledge leads to a better financial attitude, which leads to more responsible financial behavior (Bapat, 2020). Knowledge of personal finance can be a predictor of actual behaviour (Yang et al. 2022). Diem et al. (2023) confirmed that respondents' financial knowledge and attitudes differed significantly. Nilsson et al. (2016) found that participation and knowledge of financial and environmental problems influence the essence of the information search mechanism of private mutual fund investors. Kaur (2018) discovered that knowledge and interpretation influence information search behavior and mutual fund selection criteria. There is a strong positive association between information acquisition and trading activity, which means that the more financial information investors obtain, the more likely they are to trade stocks (Tauni et. al., 2017). The availability of information drives investing behavior so investors can compile financial data to analyze and interpret particular instruments as well as markets (Annamalah, 2019). Knowledge has an important impact on the behavior of investors. This will influence sound decision-making about investment (Pradana and Vanomi, 2020). Sobaih, & Elshaer,

(2023) revealed that financial knowledge had a significant positive influence on attitudes towards risky investment. As a result, the purpose of this study is to look into the role of financial knowledge as a moderator between attitude and investment intention. Therefore, the following hypothesis can be made:

H₅: Financial knowledge moderates the relationship between attitude and investment intention.

Risk Tolerance Moderates the Relationship Between Investment Intention and Actual Investment

Risk tolerance is defined as “the ability and capacity of an investor to accept and face risks when investing” (Budiarto & Susanti, 2017). Risk tolerance and decision-making regarding investments are both impacted by the behavioural biases of investors (Raheja and Dhiman, 2019). In order to reduce the impact of biases, Muktadir-Al-Mukit (2022) recommended that investors increase their risk tolerance level. Financial risk tolerance was found to be affected by financial knowledge and client-advisor relationship characteristics (Nguyen et al. 2016). Investors who are more willing to take risks are more likely to invest in stocks (Pak and Mahmood, 2015). Risk tolerance measures how much risk a person is willing to accept as a result of their investment decisions (Bahri, 2018). Financial risk tolerance is influenced by both individual characteristics and conditional factors that promote long-term change in risk tolerance (Nguyen et al., 2016). Cui Ling Song et al. (2023) suggested that investors can maximise the benefits of financial knowledge in raising their financial risk tolerance, which leads to sound financial behaviour. Based on the previous literature, the following hypothesis can be developed:

H₆: Risk tolerance moderates the relationship between Investment intention and actual investment.

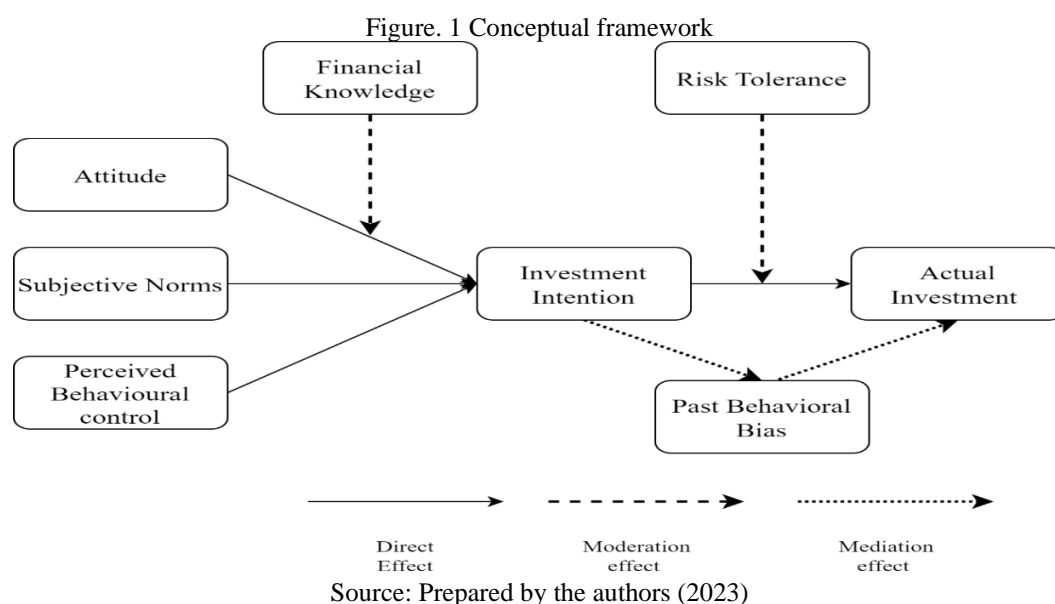
Past Behavioural Bias Towards Investment Intention and Actual Investment Behaviour in Mutual Funds

An individual identifies his or her actions in a particular manner, which may contribute to behavioural biases. Personality biases come in a number of forms, and they can be used to investigate actions. Behavioural biases include cognitive biases, which are tendencies to think and respond in certain ways. Sibanda et al. (2020) suggest that overconfidence bias raises the likelihood of investing in the debt market, likely because overconfident biased people, more

often than not, believe that they will be able to negotiate credit contracts successfully, considering the underlying risk. A potential research project that integrates the biases and assesses the impact of these biases on investment and financing decisions is expected (Baker et al., 2018). Aigbovo, and Ilaboya (2019) found that behavioral bias affects individual investment decisions. Antony and Joseph (2017) Observed Overconfidence bias had the greatest effect on investors' investment decisions. Lee and Piqueira (2019) suggested that the information advantage for insiders cannot prevent them from having behavioural biases and irrational transactions. Furthermore, Mushinada and Veluri (2019) discovered a statistically significant relationship between investor rationality and behavioral biases. This means that the rationality of the investors can accurately predict the degree of biased self-attribution and overconfidence. In this study, historical behavioral biases are investigated in the context of cognitive biases. The following hypothesis was tested to determine the influence of PBB on mutual fund investment intention:

H₇: Past behavioural biases mediate the relationship between investment intention and actual investment.

A conceptual framework for this study was constructed based on the literature review and hypotheses developed, as illustrated in Figure 1.



DATA AND METHODOLOGY

Population and Sampling

According to the AMFI (2021) report, Chennai and Coimbatore are among the top 30 (T30) cities in India where mutual funds are actively traded. This study addressed experienced

individual investors in cities like Chennai and Coimbatore. Researchers are driven and choose retail investors as respondents based on the foregoing considerations. According to AMFI, retail investors are individuals who invest with a maximum ticket size of Rs.2 lakh. Mutual fund assets held by retail investors increased by 25 percent in 2022. A random sample approach was not employed since random sampling requires data from the entire population. (Ahmad and Shah, 2020; Sekaran and Bougie, 2016). Therefore, the convenience sampling method was used to collect respondents from a population of 582 retail investors, with each respondent in the population being selected until the required sample size was attained. Sample sizes of 582 responses were collected through two different phases: in the first phase, researchers received 356 responses, and in the second phase, 226 responses.

Measures

A questionnaire survey was used in this analysis to assess the theoretical model and the established hypotheses. In this analysis, the measures used were adapted from previous literature. A three-item scale adapted from Taylor and Todd (1995) is used to assess the attitude and subjective norms. Three items from Bansal and Taylor (2002) were used to assess perceived behavioural control. Chen (2007) used a three-item scale for the purpose of investing intention in mutual funds. Two items were adopted from Dahiya & Gayatri (2017) to measure actual investment behaviour. The past behavioural bias five-item scale was adopted from Kaustia, et al. (2019). To examine financial knowledge, Keller's (1993) four-item scale was used. Three items were adopted from Rahman et al. (2020) to measure risk tolerance. Respondents were asked to answer questions in order to test each construct. A 7-point Likert scale ranging from "strongly agree" to "strongly disagree" was employed, as it has been advised by researchers to avoid the impatience level of respondents and increase the success rate and response quality (Podsakoff et al. 2003).

Data Analysis Method

This research used partial least squares structural equation modelling (PLS-SEM) as the main method of data analysis. Smart PLS-SEM is thought to be appropriate for analysing complex research models proposed as an estimation framework incorporating related theories and empirical data (Hair et al. 2011). PLS-SEM is a non-parametric technique that exploits the explained variance in latent dimensions that cannot be directly observed (Ringle et al. 2015).

Smart PLS-SEM, as opposed to covariance-based SEM, requires less information about residual distributions, measurement scales, and sample sizes (Hair et al., 2019; Udin, 2023).

RESULTS AND DISCUSSION

Respondents Profile and Factor Analysis

Table 1: Profile of Respondents

Variables	Group	Frequency	Percentage
Gender classification	Male	367	63.06
	Female	215	36.94
Respondent's Age	21-30	188	32.30
	31 -40	202	34.71
	41 – 50	121	20.79
	Above 50	71	12.20
	School education	30	5.15
Education	ITI / Diploma	58	9.97
	Under Graduate	198	34.02
	Post Graduate	263	45.19
	Post PG	63	10.82
Annual Income	Lesser than 2 lacs	146	25.09
	2 lacs – 3 lacs	223	38.32
	3 lacs – 4 lacs	172	29.55
	Above 4 lacs	41	7.04

Source: Prepared by the authors (2023)

Table 1 represents the demographic profiles of the investors. The findings showed that 63.06% of respondents are males and 36.94% are female investors. Around 35% of investors between the ages of 31-40, 32.30% of investors between the age group of 21-30. Majority of investors had a post-graduate degree 45.19% followed by under graduate 34.02%. 38.32% of Investors earning between 200,000 and 300,000 rupees per year and 29.55% of investors getting 300,000 to 400,000.

Measurement Model Results

Cronbach's alpha and composite reliability were both utilized in order to investigate the validity of the latent constructs' dependability. According to Hair et al. (2019), Cronbach's and composite reliability values that are better than 0.70 are considered acceptable. According to Table 2, both the Cronbach's reliability value and the composite reliability value for all constructs were higher than the cutoff value of 0.70, which suggests that there is a high level of dependability among the measurements. Convergent validity was met when the AVE values for all model constructs were greater than 0.50 Fornell and Larcker (1981).

Table. 2 Reliability and convergent validity results

Construct	Items	Loadings	CA	CR	AVE
Actual Investment Behaviour	AIB1	0.949	0.888	0.888	0.899
	AIB2	0.947			
Attitude	ATT1	0.885	0.878	0.901	0.802
	ATT2	0.927			
	ATT3	0.874			
Financial Knowledge	FKN1	0.905	0.869	0.883	0.722
	FKN2	0.852			
	FKN3	0.891			
	FKN4	0.740			
Past Behavioural Bias	PBB1	0.915	0.913	0.914	0.853
	PBB2	0.914			
	PBB3	0.728			
	PBB4	0.748			
	PBB5	0.839			
Perceived Behavioural Control	PBC1	0.879	0.932	0.938	0.786
	PBC2	0.929			
	PBC3	0.852			
Investment Intention	INT1	0.914	0.912	0.922	0.850
	INT2	0.791			
	INT3	0.848			
Risk Tolerance	RT1	0.773	0.823	0.997	0.711
	RT2	0.865			
	RT3	0.887			
Subjective Norms	SN1	0.908	0.912	0.912	0.850
	SN2	0.927			
	SN3	0.930			

Source: Prepared by the authors (2023)

Cronbach's alpha – CA, Composite reliability – CR Average variance extracted – AVE

Table 3 shows that the square root of the average variance extracted from the diagonal elements is shown by the bolded elements. Elements that are not on the diagonal display shared variations. All of the shared variances between the factors in the framework were found to be smaller than the square root of the individual factor AVE, which provided evidence that the discriminant validity of the model was good and that the assumptions were conceptually and empirically distinct from one another.

Table 3. Fornell – Larcker criterion (Discriminant Validity results)

	AIB	ATT	FKN	INT	PBB	PBC	RT	SN
AIB	0.948							
ATT	0.788	0.896						
FKN	0.745	0.787	0.849					

INT	0.979	0.790	0.776	0.923			
PBB	0.908	0.825	0.802	0.943	0.886		
PBC	0.900	0.876	0.790	0.922	0.961	0.922	
RT	0.583	0.792	0.663	0.637	0.645	0.700	0.843
SN	0.858	0.779	0.810	0.874	0.899	0.863	0.922

Source: Prepared by the authors (2023)

AIB – Actual investment behaviour, ATT – Attitude, FKN – Financial Knowledge, INT – Investment intention, PBB – Past behavioural bias, PBC – Past behavioural control, RT – Risk tolerance, SN – Subjective Norms

Structural Model Results

Table. 4 Direct effect results

Hypothesis	Constructs	β	SD	T	P	Result
H₁	ATT → INT	-0.141	0.035	4.050	0.000	supported
H₂	SN → INT	0.281	0.039	7.232	0.000	supported
H₃	PBC → INT	0.749	0.040	18.709	0.000	supported
H₄	INT → AIB	1.148	0.028	41.047	0.000	supported

Source: Prepared by the authors (2023)

In Tables 4, 5, and 6, the results of the path coefficients, standard deviation, t-values, and p-values are presented to explain the structural model. Attitude was negatively significant with mutual fund investment intention ($\beta = -0.141$, $t = 4.050$, and $p < 0.05$); subjective norms were positively significant with mutual fund investment intention ($\beta = 0.281$, $t = 7.232$, and $p < 0.05$); perceived behavioural control positively influences investment intention on mutual fund ($\beta = 0.749$, $t = 18.709$, and $p < 0.05$); and furthermore, mutual fund investment intention significantly influences actual investment behaviour ($\beta = 1.148$, $t = 41.047$, and $p < 0.05$) (Table 4).

The following (table 5) are the moderation outcomes of this research: The relationship between attitude and intention to invest in mutual funds was strongly moderated by financial literacy ($\beta = 0.022$, $t = 2.857$, $p < 0.05$). And also, risk tolerance significantly moderates the relationship between mutual fund investment intention, and actual investment behaviour ($\beta = 0.046$, $t = 7.071$, $p < 0.05$).

Table. 5 Moderation results

Hypothesis	Constructs	β	SD	T	P	Result
H ₅	FKN * ATT → INT	0.022	0.012	2.857	0.003	Moderated
H ₆	RT * INT → AIB	0.046	0.006	7.071	0.000	Moderated

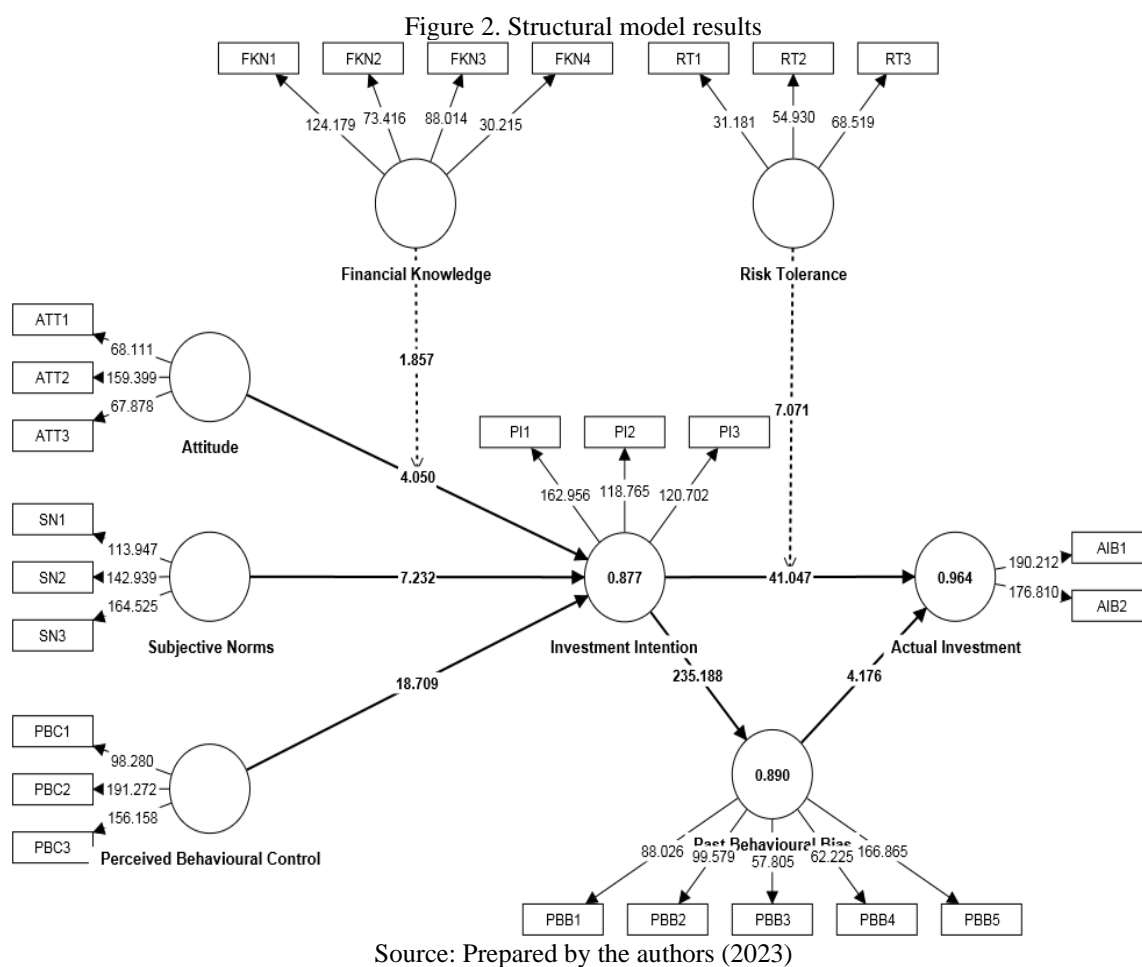
Source: Prepared by the authors (2023)

Table. 6 Mediation results

Hypothesis	Constructs	β	SD	T	P	Result
H ₇	INT → PBB → AIB	-0.125	0.030	4.186	0.000	Partial Mediation

Source: Prepared by the authors (2023)

The mediation analysis found that past behavioural bias negatively mediated (partial) the relationship between mutual fund investment intention and actual investment behaviour ($\beta = -0.125$, $t = 4.186$, $p < 0.05$) (Table 6). Direct and indirect paths within the conceptual model are depicted in Figure 2.



DISCUSSION

The primary aim of this study was to investigate the impact of mutual fund investing behaviour using the TPB model. To further understand individual investors' intentions to engage in mutual funds, the impact of ATT, SN, and PBC on investor intentions and, actual investment behaviour were hypothesised and closely analysed, with financial knowledge and risk tolerance functioning as moderating factors. Additionally, past behavioural bias is a mediating factor. According to the findings, it would seem that the Theory of Planned

Behaviour is a highly effective model for forecasting the investment behaviour of mutual fund investors. In addition, the results of the current investigation provided evidence in favour of each of the hypotheses that had been offered.

First hypothesis: attitude negatively influences mutual fund investment intention. Thus, H1 was supported. Previous researchers Kautsar et al. (2018) also observed that attitudes are unexpected by interest (intention) in the purchase of financial products. It indicates that attitude alone is not sufficient to create an investment intention; rather, a number of additional factors also impact the attitude. Subjective norms are positively connected with mutual fund investment intentions. Hence, hypothesis 2 is supported. This result is consistent with previous studies such as Aziz & Afaq (2018), Pandey et al. (2022); Raut, & Das (2017). It shows that the information or knowledge of friends, family members, and peers impacts the investing intentions of potential investors. H₃ supports the study. i.e., perceived behavioural control significantly influences the investment intention. However, our results are in line with Raut & Das (2017), Raut, Das, & Kumar (2018), and Thanki et al. (2022). Investors have strong faith that people who engage in certain behaviours have access to resources and opportunities. Hypothesis 4 also supports the research. Mutual fund investment intention positively connects with actual investment behaviour. The previous scholars, Agmeka et al. (2019); Lee et al. (2022); Warganegara & Hendijani (2022), also support the above statement.

The moderation result shows that financial knowledge positively moderates the relationship between attitude and investment intention. Thus, H₅ supported. In comparison to hypothesis 1, hypothesis 5 was shown to be strongly connected. As a result, it has been shown that financial knowledge is a crucial predictor of attitude and an investor's intention. This suggests that the buyers have a greater appreciation of the fact that knowledgeable investments would have a long-term return and a competitive advantage. Risk tolerance also positively moderates the relationship between investment intention and actual investment behaviour. Thus, H₆ supported the study. Previous researchers, Sourirajan & Perumandla (2022), confirmed that actual investment behaviour was driven by habits. It implies that risk tolerance is one of the key psychological constructs necessary to convert investment intent into actual investment. Finally, the mediation result of past behavioural bias between investment intention and actual investment behaviour was negatively significant and partially mediated. It implies that past behavioural bias never supports the investor in transforming investment intention into actual investment behaviour.

IMPLICATIONS

The current study makes important contributions from both a theoretical and managerial standpoint. The study endorsed the well-established socio-psychological model, TPB, and financial knowledge, risk tolerance, and past behavioural bias in assessing investment intention in the context of a developing country, India. The study will assist academics in looking deeper into other constructs that may affect investment behavior. Attitude, financial knowledge, and risk tolerance are emerged as the most important determinant of mutual fund investment intention. This highlights the significance of creating favorable conditions in terms of accessibility, which may encourage and ease the decision of investors to purchase mutual funds.

Financial charges and information about risk seem to be important to retail investors. Mutual fund managers should be taken into account in disclosures and mutual fund marketing. Marketers can explain how their mutual fund offerings would help both the market and investors. Marketers should prioritize proper communication about the benefits of mutual fund to investors, as communication is regarded as a critical tool for the success of mutual fund products. Financial knowledge, risk tolerance, and past behavioural biases are interrelated. One has to increase their financial literacy in order to increase risk tolerance and decrease prejudice. As a result, training and education initiatives may be provided by policymakers and fund managers. In order to increase their financial literacy, investors ought to stay clear of shortcuts and make an effort to learn new topics. Because of the market's uncertainty, investors are still uncertain about whether or not to invest in mutual funds. To address this issue, the Government should take steps to raise investor awareness of mutual funds. And also, the Government has stepped forward to issue new funds (NFO) to investors. Because, India has one of the youngest populations in the world, and according to UN population projections, this young demographic will remain relatively unchanged in the near future (CRISIL, 2022). Therefore, In the future, young people with the proper financial education and training can make sound financial market investments on their own.

CONCLUSION

This study was intended to contribute in many respects to the body of literature. First, rather than adhering to fundamental or conventional methods, this research expanded on the experience of the behavioural dimensions of individual investment. Secondly, this research expanded the TPB model by adding a new framework (actual investment behaviour), financial

knowledge, risk tolerance, and past behavioural biases as a new construct to be used by individual investors to know their investment purpose.

Investors switch to knowledge search from different sources after the first stage of decision-making, such as feedback from their friends and family, newspaper or magazine information, and from their past experiences. Investors analyze all the possible alternatives after collecting the information and choose a choice. Overall, the mutual fund investments were found to be efficient in moderating the relationship of financial knowledge between attitude and investment decision. Findings have also shown that behavioural biases are inseparable from the decision-making of human beings. It is, therefore, necessary for the Investors should be aware of this problem so that it is possible to prevent irrational decision-making and pursue profitable investment strategies. Researcher suggests investors define their demand for investments and analyze whether investing in mutual funds will raise their assets.

Although this research draws on the previous literature in India on behavioural finance, there are some limitations as well. First and foremost, this research was conducted in India's southern region; there may be unique characteristics that might not extend to other regions of India or emerging markets. Second, it would be interesting if future studies might integrate the experimental approach and theories like service quality to evaluate the quality of the funds and fund providers. Third, environments, social, governance and psychological biases can be considered. Finally, it is also possible to examine interrelationships between various psychological variables.

REFERENCES

Agmeka, F., Wathoni, R. N., & Santoso, A. S. (2019). The influence of discount framing towards brand reputation and brand image on purchase intention and actual behaviour in e-commerce. *Procedia Computer Science*, 161, 851-858. <https://doi.org/10.1016/j.procs.2019.11.192>

Ahmad, M., & Shah, S. Z. (2020). Overconfidence heuristic-driven bias in investment decision-making and performance: Mediating effects of risk perception and moderating effects of financial literacy. *Journal of Economic and Administrative Sciences*, 38(1), <https://doi.org/10.1108/JEAS-07-2020-0116>

Ahmed, N., Li, C., Khan, A., Qalati, S. A., Naz, S., & Rana, F. (2020). Purchase intention toward organic food among young consumers using theory of planned behavior: Role of environmental concerns and environmental awareness. *Journal of Environmental Planning and Management*, 64(5), 796-822. <https://doi.org/10.1080/09640568.2020.1785404>

Aigbovo, O., & Ilaboya, O. J. (2019). Does Behavioral Biases Influences Individual Investment Decisions. *Management Science Review*, 10(1), 68-89.

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

Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)

Ajzen, I., & Fishbein, M. (1975). A Bayesian analysis of attribution processes. *Psychological Bulletin*, 82(2), 261-277. <https://doi.org/10.1037/h0076477>

Akhtar, F., & Das, N. (2019). Predictors of investment intention in Indian stock markets: Extending the theory of planned behaviour. *International journal of bank marketing*, 37(1), 97-119. <https://doi.org/10.1108/IJBM-08-2017-0167>

Akmal, P. A., Handayani, P. W., & Azzahro, F. (2020). Mutual fund usage behaviour in Indonesia: Comparative study of investor risk profile groups. 2020 International Conference on Advanced Computer Science and Information Systems (ICACSIS). <https://doi.org/10.1109/ICACSIS51025.2020.9263154>

Allah Pitchay, A. B., Mohd Thas Thaker, M. A., Azhar, Z., Mydin, A. A., & Mohd Thas Thaker, H. B. (2019). Factors persuade individuals' behavioral intention to opt for Islamic bank services. *Journal of Islamic Marketing*, 11(1), 234-250. doi:10.1108/jima-02-2018-0029, <https://doi.org/10.1108/JIMA-02-2018-0029>

Alleyne, P., & Phillips, K. (2011). Exploring academic dishonesty among University students in Barbados: An extension to the theory of planned behaviour. *Journal of Academic Ethics*, 9(4), 323-338. <https://doi.org/10.1007/s10805-011-9144-1>

AMFI, (2021) World investor week Nov 22-28, 2021. Retrieved from <https://www.amfiindia.com/Themes/Theme1/downloads/circulars/ListofTop30cities-ason31-Mar-2021>

Amin, H., Abdul Rahman, A. R., Abdul Razak, D., & Rizal, H. (2017). Consumer attitude and preference in the Islamic mortgage sector: A study of Malaysian consumers. *Management Research Review*, 40(1), 95-115. <https://doi.org/10.1108/MRR-07-2015-0159>

Andam, A. C., & Osman, A. Z. (2019). Determinants of intention to give zakat on employment income. *Journal of Islamic Accounting and Business Research*, 10(4), 528-545. <https://doi.org/10.1108/JIABR-08-2016-0097>

Annamalah, Raman, Marthandan, & Logeswaran. (2019). An empirical study on the determinants of an investor's decision in unit trust investment. *Economies*, 7(3), 80. <https://doi.org/10.3390/economies7030080>

Antony, A., & Joseph, A. I. (2017). Influence of behavioural factors affecting investment decision-An AHP analysis. *Metamorphosis: A Journal of Management Research*, 16(2), <https://doi.org/10.1177/0972622517738833>

Aziz, S., Afaq, Z., & Bashir, U. (2018), Behavioural intention to adopt Islamic banking in Pakistan: a study based on theory of planned behavior. *Journal of Islamic Business and Management*, 8(2). <https://doi.org/10.26501/jibm/2018.0802-005>

Azizam, N. A., Dzulkpli, M. R., Shamimi, N. I., Maon, S. N., John, D., Belawing, J., ... & Yahaya, N. (2020). Applicability of theory of planned behavior and protection motivation theory in predicting intention to purchase health insurance. *Advances in Business Research International Journal*, 6(1), 1-9. <https://doi.org/10.24191/abrij.v6i1.9939>

Bahri, M. S. (2018). Pengaruh risk tolerance, risk perception dan kecerdasan spiritual terhadap keputusan investasi (Doctoral dissertation, STIE PERBANAS SURABAYA).

Baker, H. K., Kumar, S., & Singh, H. P. (2018). Behavioural biases among SME owners. *International Journal of Management Practice*, 11(3), 259. <https://doi.org/10.1504/IJMP.2018.092867>

Bansal, H. S., & Taylor, S. F. (2002). Investigating interactive effects in the theory of planned behavior in a service-provider switching context. *Psychology and Marketing*, 19(5), 407-425. <https://doi.org/10.1002/mar.10017>

Bapat, D. (2020). Antecedents to responsible financial management behavior among young adults: moderating role of financial risk tolerance. *International Journal of Bank Marketing*, 38(5), 1177-1194. <https://doi.org/10.1108/IJBM-10-2019-0356>

Budiarto, A., & Susanti. (2017). Pengaruh Financial Literacy, Overconfidence, Regret Aversion Bias, dan risk Tolerance Terhadap Keputusan Investasi. *Jurnal Ilmu Manajemen*, 05(2), 1-9

Chen, M. F. (2007). Consumer attitudes and purchase intentions in relation to organic foods in Taiwan: Moderating effects of food-related personality traits. *Food Quality and preference*, 18(7), 1008-1021. <https://doi.org/10.1016/j.foodqual.2007.04.004>

Chen, M. (2020). The impacts of perceived moral obligation and sustainability self-identity on sustainability development: A theory of planned behavior purchase intention model of sustainability-labelled coffee and the moderating effect of climate change scepticism. *Business Strategy and the Environment*, 29(6), 2404-2417. <https://doi.org/10.1002/bse.2510>

CRISIL. (2022). CRISIL: Making markets function better. <https://www.crisil.com/content/dam/crisil/our-analysis/reports/Research/documents/2022/12/the-big-shift-in-financialisation.pdf>

Cui Ling Song, Dongfang Pan, Arslan Ayub & Binbin Cai (2023) The Interplay Between Financial Literacy, Financial Risk Tolerance, and Financial Behaviour: The Moderator Effect of Emotional Intelligence, *Psychology Research and Behavior Management*, 535-548, <https://doi.org/10.2147/PRBM.S398450>

Dahiya, R., & Gayatri. (2017). Investigating Indian car buyers' decision to use digital marketing communication: an empirical application of decomposed TPB. *Vision*, 21(4), 385-396. <https://doi.org/10.1177/0972262917733175>

Diem, N. T. N., Phuong, L. T. M., Trang, D. T., & Anh, P. T. (2023), The Impact of Personal Financial Literacy on the Choice of Lending Channel by Vietnamese Householders Who Just Escaped Poverty. *International Journal of Professional Business Review*, 8(4), e01856. <https://doi.org/10.26668/businessreview/2023.v8i4.1856>

- Echchabi, A., Azouzi, D., & Aziz, H. A. (2016). The future prospects of Islamic banking in Tunisia: An empirical survey. *EuroMed Journal of Business*, 11(1), 119-131. <https://doi.org/10.1108/EMJB-03-2015-0018>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39. <https://doi.org/10.2307/3151312>
- Gao, L., Wang, S., Li, J., & Li, H. (2017). Application of the extended theory of planned behavior to understand individual's energy saving behavior in workplaces. *Resources, Conservation and Recycling*, 127, 107-113. <https://doi.org/10.1016/j.resconrec.2017.08.030>
- Hair, J. F. (2011). Multivariate data analysis: An overview. *International Encyclopaedia of Statistical Science*, 904-907. https://doi.org/10.1007/978-3-642-04898-2_395
- Hair, J.F., Risher, J.J., Sarstedt, M. and Ringle, C.M. (2019), "When to use and how to report the results of PLS-SEM", *European Business Review*, Vol. 31 No. 1, pp. 2-24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hamilton, B., & Terblanche-Smit, M. (2018). Consumer intention to purchase green vehicles in the South African market: A theory of planned behaviour perspective. *South African Journal of Business Management*, 49(1). <https://doi.org/10.4102/sajbm.v49i1.190>
- Haslem, J. A. (Ed.). (2009). *Mutual Funds: Portfolio structures, analysis, management, and stewardship* (Vol. 4). John Wiley & Sons. <https://doi.org/10.1002/9781118266397>
- IBEF. (2023). Financial service sector, Indian financial system - IBEF. India Brand Equity Foundation. Retrieved April 10, 2023, from <https://www.ibef.org/industry/financial-services-india>
- Indiani, N. L. P., & Fahik, G. A. (2020). Conversion of online purchase intention into actual purchase: the moderating role of transaction security and convenience. *Business: Theory and Practice*, 21(1), 18-29. <https://doi.org/10.3846/btp.2020.11346>
- Judge, M., Warren-Myers, G., & Paladino, A. (2019). Using the theory of planned behaviour to predict intentions to purchase sustainable housing. *Journal of Cleaner Production*, 215, 259-267. <https://doi.org/10.1016/j.jclepro.2019.01.029>
- Juniwati. (2014). Influence of perceived usefulness, ease of use, risk on attitude and intention to shop online. *European Journal of Business and Management*, 6(27), 218-228.
- Kaur, I. (2018). Mutual fund investor's behaviour towards information search and selection criteria. *Qualitative Research in Financial Markets*, 10(4), 395-414. doi:10.1108/qrfm-09-2017-0084. <https://doi.org/10.1108/QRFM-09-2017-0084>
- Kaur, S. J., & Bharucha, J. (2021). The emerging mutual fund industry in India: an impact analysis of investors' awareness on investment behaviour. *International Journal of Business and Globalisation*, 27(1), 51-69. <https://doi.org/10.1504/IJBG.2021.111960>

Kaustia, M., Conlin, A., & Luotonen, N. (2019). What Drives the Heterogeneity in Portfolio Choice? The Role of Institutional, Traditional, and Behavioural Factors. *Cognitive Social Science eJournal*. <https://doi.org/10.2139/ssrn.2845963>

Kautsar, A., Asandimitra, N., Paramita, R. S., Musdholifah, M., Hartono, U., Kusumaningrum, T. M., & Isbanah, Y. (2019). Risk and return portfolio of food and beverages companies in Ramadhan 2019. *Proceedings of the Mathematics, Informatics, Science, and Education International Conference (MISEIC 2019)*. doi:10.2991/miseic-19.2019.16. <https://doi.org/10.2991/miseic-19.2019.16>

Keller, K. L. (1993). Conceptualizing, measuring, and managing customer-based brand equity. *Journal of Marketing*, 57(1), 1. <https://doi.org/10.2307/1252054>

Kyto, E., Virtanen, M., & Mustonen, S. (2019). From intention to action: Predicting purchase behavior with consumers' product expectations and perceptions, and their individual properties. *Food quality and preference*, 75, 1-9. <https://doi.org/10.1016/j.foodqual.2019.02.002>

Lai, C. P. (2019). Personality traits and stock investment of individuals. *Sustainability*, 11(19), 5474. <https://doi.org/10.3390/su11195474>

Lajuni, N., Wong, W. P. M., Yacob, Y., Ting, H. & Jausin, A. (2017). Intention to Use Islamic Banking Products and Its Determinants. *International Journal of Economics and Financial Issues*, 7 (1), 329-333. Retrieved from <https://dergipark.org.tr/en/pub/ijefi/issue/32002/353197>

Lee, E., & Piqueira, N. (2019). Behavioural biases of informed traders: Evidence from insider trading on the 52-week high. *Journal of Empirical Finance*, 52, 56-75. <https://doi.org/10.1016/j.jempfin.2019.02.007>

Lee, V., Park, S., & Lee, D. (2022). The Effect of E-commerce Service Quality Factors on Customer Satisfaction, Purchase Intention, and Actual Purchase in Uzbekistan. *Global Business & Finance Review*, 27(3), 56. <https://doi.org/10.17549/gbfr.2022.27.3.56>

Maheshwari, R. K., & Pandey, K. (2021). Analysis of Indian mutual fund market mechanism: present status and future perspectives. *International Journal of Indian Culture and Business Management*, 23(3), 263-289. <https://doi.org/10.1504/IJICBM.2021.116121>

Mohan, R. ., & Kinslin, D., (2022), The Theory of Planned Behaviour and Examining Consumer Purchase Behaviours of Energy-Efficient Lighting Products. *International Journal of Professional Business Review*, 7(2), e0422. <https://doi.org/10.26668/businessreview/2022.v7i2.422>

Muktadir-Al-Mukit, D. (2022). Do sociodemographic factors have influence on risk tolerance level of stock market investors? An analysis from a developing country perspective. *South Asian Journal of Business Studies*, 11(2), 149-173. <https://doi.org/10.1108/SAJBS-11-2019-0193>

Mushinada, V. N., & Veluri, V. S. (2019). Elucidating investors' rationality and behavioural biases in Indian stock market. *Review of Behavioral Finance*, 11(2), 201-219. <https://doi.org/10.1108/RBF-04-2018-0034>

Musthaq, F. (2021). Development finance or financial accumulation for asset managers?: The perils of the global shadow banking system in developing countries. *New political economy*, 26(4), 554-573. <https://doi.org/10.1080/13563467.2020.1782367>

Nedumparambil, E., Bhandari, A.K. (2022) Risk factors, uncertainty, and investment decision: evidence from mutual fund flows from India. *Indian Economic Review*. 57, 349-372 (2022). doi.org/10.1007/s41775-022-00155-8. <https://doi.org/10.1007/s41775-022-00155-8>

Nguyen, L., Gallery, G., & Newton, C. (2016). The influence of financial risk tolerance on investment decision-making in a financial advice context. *Australasian Accounting, Business and Finance Journal*, 10(3), 3-22. <https://doi.org/10.14453/aabfj.v10i3.2>

Nilsson, J., Nordvall, A., & Isberg, S. (2016). The information search process of socially responsible investors. *Financial Literacy and the Limits of Financial Decision-Making*, 57-76. https://doi.org/10.1007/978-3-319-30886-9_4

Olga Pak & Monowar Mahmood, (2015),"Impact of personality on risk tolerance and investment decisions", *International Journal of Commerce and Management*, Vol. 25 Iss 4 pp. 370 - 384, <https://doi.org/10.1108/IJCoMA-01-2013-0002>

Ong, L. L. and Sy, A. (2004). The role of mature market mutual funds in emerging markets: myth or mayhem?. IMF Working Paper. International Monetary Fund. <https://doi.org/10.2139/ssrn.3923462>

Pandey, D., Kakkar, A., & Farhan, M. (2022). Effect of decisional factors on mutual funds actual purchase behaviour among Indian investors. *International Journal of Business and Globalisation*, 32(4), 377-391. <https://doi.org/10.1504/IJBG.2022.128174>

Pires, G., Stanton, J., & Eckford, A. (2004). Influences on the perceived risk of purchasing online. *Journal of Consumer Behaviour: An International Research Review*, 4(2), 118-131. <https://doi.org/10.1002/cb.163>

Podsakoff, P. M., MacKenzie, S. B., Lee, J., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903. doi:10.1037/0021-9010.88.5.879. <https://doi.org/10.1037/0021-9010.88.5.879>

Pradana, M. N., & Vanomy, A. E. (2020). The effect of knowledge management on investor behaviour. *Almana: Jurnal Manajemen dan Bisnis*, 4(3), 334-338. <https://doi.org/10.36555/almana.v4i3.1464>

Rahman, M. (2020). Propensity toward financial risk tolerance: an analysis using behavioural factors. *Review of Behavioral Finance*, 12(3), 259-281. <https://doi.org/10.1108/RBF-01-2019-0002>

Rahmani, A., Mashayekh, J., Aboojafari, R., & Bonyadi Naeini, A. (2023). Determinants of households' intention for investment in renewable energy projects. *Renewable Energy*, 205, 823-837. <https://doi.org/10.1016/j.renene.2023.01.096>

Raheja, S., & Dhiman, B. (2019). Relationship between behavioral biases and investment decisions: The mediating role of risk tolerance. *DLSU Business and Economics Review*, 29(1), 31-39.

Raut, R. K. (2020). Past behaviour, financial literacy and investment decision-making process of individual investors. *International Journal of Emerging Markets*, 15(6), 1243-1263. <https://doi.org/10.1108/IJOEM-07-2018-0379>

Raut, R. K., & Das, N. (2017). Individual investors' attitude towards online stock trading: Some evidence from a developing country. *International Journal of Economics and Business Research*, 14(3), 254. <https://doi.org/10.1504/IJEER.2017.10008358>

Raut, R. K., Das, N., & Kumar, R. (2018). Extending the theory of planned behaviour: Impact of past behavioural biases on the investment decision of Indian investors. *Asian Journal of Business and Accounting*, 11(1), 265-291. <https://doi.org/10.22452/ajba.vol11no1.9>

Raza, S. A., Ahmed, R., Ali, M., & Qureshi, M. A. (2019). Influential factors of Islamic insurance adoption: An extension of theory of planned behavior. *Journal of Islamic Marketing*, 11(6), 1497-1515. <https://doi.org/10.1108/JIMA-03-2019-0047>

Rehman, S. U., Bhatti, A., Mohamed, R., & Ayoup, H. (2019). The moderating role of trust and commitment between consumer purchase intention and online shopping behavior in the context of Pakistan. *Journal of Global Entrepreneurship Research*, 9(1). <https://doi.org/10.1186/s40497-019-0166-2>

Ringle, C., Da Silva, D., & Bido, D. (2015). Structural equation modelling with the SmartPLS. *Brazilian Journal of Marketing*, 13(2). <https://doi.org/10.5585/remark.v13i2.2717>

Sekaran, U. (2006). *Research methods for business: A skill building approach*, 4Th ed. John Wiley & Sons.

Shanmugham, R., & Ramya, K. (2012). Impact of social factors on individual investors' trading behaviour. *Procedia Economics and Finance*, 2, 237-246. [https://doi.org/10.1016/S2212-5671\(12\)00084-6](https://doi.org/10.1016/S2212-5671(12)00084-6)

Shin, Y. H., Jung, S. E., Im, J., & Severt, K. (2020). Applying an extended theory of planned behavior to examine state-branded food product purchase behavior: The moderating effect of gender. *Journal of Foodservice Business Research*, 23(4), 358-375. <https://doi.org/10.1080/15378020.2020.1770043>

Sibanda, W., Patena, W., Cwynar, W., & Cwynar, A. (2020). Young adults' financial literacy and overconfidence bias in debt markets. *International Journal of Business Performance Management*, 21(1/2), 95. <https://doi.org/10.1504/IJBPM.2020.10027635>

Sobaih AEE, Elshaer IA. (2023) Risk-Taking, Financial Knowledge, and Risky Investment Intention: Expanding Theory of Planned Behavior Using a Moderating-Mediating Model. *Mathematics*. 11(2):453. <https://doi.org/10.3390/math11020453>

Sourirajan, S. and Perumandla, S. (2022), "Do emotions, desires and habits influence mutual fund investing? A study using the model of goal-directed behavior", *International Journal of Bank Marketing*, Vol. 40 No. 7, pp. 1452-1476. <https://doi.org/10.1108/IJBM-12-2021-0540>

Tauni, M. Z., Fang, H. X., & Iqbal, A. (2017). The role of financial advice and word-of-mouth communication on the association between investor personality and stock trading behavior: Evidence from Chinese stock market. *Personality and Individual Differences*, 108, 55-65. <https://doi.org/10.1016/j.paid.2016.11.048>

Taylor, S., & Todd, P. (1995). An integrated model of waste management behavior. *Environment and Behavior*, 27(5), 603-630. <https://doi.org/10.1177/0013916595275001>

Thanki H, Shah S, Rathod HS, Oza AD, Burduhos-Nergis DD. (2022). I Am Ready to Invest in Socially Responsible Investments (SRI) Options Only If the Returns Are Not Compromised: Individual Investors' Intentions toward SRI. *Sustainability*. 14(18):11377. <https://doi.org/10.3390/su141811377>

Turtiainen, M., Saastamoinen, J., Suhonen, N. and Kainulainen, T. (2022), "Key investor information disclosure regulation and retail mutual fund flows in the Finnish market", *International Journal of Bank Marketing*, Vol. 40 No. 4, pp. 865-885. <https://doi.org/10.1108/IJBM-10-2021-0462>

Udin, U. (2023), Linking Transformational Leadership to Organizational Learning Culture and Employee Performance: the Mediation-Moderation Model. *International Journal of Professional Business Review*, 8(3), e01229. <https://doi.org/10.26668/businessreview/2023.v8i3.1229>

Waqas, M., Mian, S.J. and Nazir, N. (2023), "The role of religious advertising and personal selling in enhancing mutual fund purchase intention and sales in Pakistan: a managerial perspective", *Journal of Islamic Marketing*, Vol. 14 No. 1, pp. 43-60. <https://doi.org/10.1108/JIMA-05-2020-0162>

Warganegara, D. L., & Babolian Hendijani, R. (2022). Factors that drive actual purchasing of groceries through e-commerce platforms during COVID-19 in Indonesia. *Sustainability*, 14(6), 3235. <https://doi.org/10.3390/su14063235>

Yang, T.-Y., Tsai, P.-H., & Chiang, T.-F. (2022). The effect of financial knowledge on asset allocation for Chinese households. *Pacific Economic Review*, 1- 27. <https://doi.org/10.1111/1468-0106.12390>