

## DOES BEHAVIORAL FACTORS AFFECTS INVESTOR'S DECISION MAKING WHEN USING ACCOUNTING INFORMATION SYSTEM

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### Abstract

This study investigates the behavioral elements that shape investor decision-making, particularly in the context of stock market investments supported by accounting information systems (AIS). Behavioral finance has emerged as an important field that examines how psychological traits and cognitive shortcuts influence financial judgments, challenging the assumption of purely rational investor behavior. The study gathered data from 270 retail investors and examined their responses utilizing SPSS and AMOS software. Advanced statistical methods, such as confirmatory factor analysis (CFA) and structural equation modeling (SEM), were utilized to examine the correlations among variables. The results indicate that psychological factors, including emotions, attitudes, moods, personality traits, and heuristic-based decision-making, profoundly influence investment behavior. Furthermore, the findings validate that these determinants persist in influencing investor decisions, even in the presence of dependable financial data disseminated via AIS. This work offers theoretical and practical contributions by integrating insights from behavioral finance and accounting systems research. It contributes evidence to the expanding body of literature that synthesizes human psychology with financial technology. The results provide direction to investors, financial institutions, and policymakers on mitigating biases and fostering more rational investment strategies through the appropriate utilization of AIS.

**Keywords:** Accounting Information System, Behavioral Factors, Investors

### Introduction

In real life many investors let emotions like fear and excitement, along with habits like being overconfident and copying others, have an impact on their choices even when AIS shows they should do something else.

The gap between what AIS is meant for and how investors behave drives this study. The research looks at how behavioral factors shape the use of accounting data in investing. It focuses on three main influences: overconfidence, which can make investors trust their own judgment too much; herd behavior, which pushes people to follow market trends instead of doing their own analysis; and how people see risk, which affects whether they make safe or bold choices. These factors have an impact on individual results and create patterns that can affect the stability of the whole market. Looking at how behavioral traits and AIS connect is key in today's financial world, which is super fast and full of easy-to-get info. Regular investors often use data that's right in front of them without thinking about how their own biases might skew their choices. This study wants to help people better understand how to use good systems and to help investors get past behavioral roadblocks.

This study matters for two reasons. It adds to the growing research at the crossroads of behavioral finance and accounting information systems, an area that's still not explored. It also offers insights to help regulators, banks, and investors come up with ways to lessen the bad effects of mental biases. This work highlights that to make better decisions, we need more than just fancy tech and correct data. We also need to get how human nature shapes our money choices.

### **Literature Review**

Research in behavioral finance consistently shows that investors' decisions are not always rational but are shaped by both psychological factors and the quality of information systems supporting those decisions. Accounting Information Systems (AIS) play a central role by providing timely and reliable data, yet the way investors process and interpret this information often depends on their cognitive and emotional biases.

Several studies emphasize the **importance of AIS quality** in decision-making. For example, prior research on firms in emerging economies demonstrated that well-structured AIS improves both decision-making success and organizational performance, particularly when complemented by accurate non-financial information (Tran Thanh Thuy, 2025). Similar work in the Saudi context also revealed that cultural conditions and national initiatives, such as Vision 2030, significantly influence the adoption of AIS, confirming the relevance of the UTAUT framework in explaining user behavior (Alquhaif & Al-Mamary, 2025). Together, these studies underline that effective systems must be accompanied by supportive environments to enhance their impact.

On the other hand, behavioral finance research highlights that **psychological biases remain strong even in the presence of reliable systems**. Studies focusing on younger generations of investors identified overconfidence, herding, fear of missing out, and regret aversion as powerful drivers of financial decisions (Maheshwari & Samantaray, 2025). Interestingly, technology-driven tools such as AI-based advisory services were found to reduce the influence of certain biases, especially herding and FOMO, suggesting that digital innovations can partially offset irrational behavior.

Other contributions further demonstrate that **emotional and cognitive biases act simultaneously**. Evidence shows that regret aversion and loss aversion often dominate investment decisions, while overconfidence and the Barnum effect also play significant roles (Bihari et al., 2025). Importantly, susceptibility to vague or generalized information was found to have a negative impact on outcomes, underscoring the risks associated with heuristic-driven judgments.

### **Research Methodology**

**Research Design:** This study adopts a **descriptive and explanatory research design**. The descriptive element is used to observe and document patterns of behavior among equity investors, while the explanatory element seeks to test causal relationships between psychological factors and investment decision-making when using an accounting information system.

**Population and Sample:** The target population consists of **retail equity investors**—individuals who actively participate in stock markets for personal investment rather than institutional trading. A total of **270 respondents** were surveyed. The sample was selected using a **convenience sampling technique**, owing to accessibility and feasibility considerations.

**Data Collection Methods:** Two sources of data were employed: **Primary Data** Structured questionnaires were distributed to retail investors. The questionnaire was standardized to ensure reliability and comparability, covering constructs related to psychological factors, demographic variables, and investment decisions. **Secondary Data:** Supporting information was obtained from published sources such as financial reports, academic articles, market statistics, and news reports. These data provided context and reinforced the primary findings.

**Research Instrument:** The questionnaire was designed based on prior literature in behavioral finance. Items were measured using a **five-point Likert scale**, capturing responses from “strongly disagree” to “strongly agree.” Constructs included emotions, heuristics, speculative behavior, personality traits, and attitudes.

### **Objectives**

1. To outline the conceptual foundation of stock market investment behavior.
2. To investigate the impact of demographic attributes on investors’ psychological dimensions.
3. To identify the psychological factors that shape investor behavior in stock purchasing decisions.
4. To design and validate a structural model, using SEM, that explains how psychological elements influence investment decisions when employing an Accounting Information System (AIS).

### **Hypotheses**

- **H01:** Psychological factors have no significant association with investors’ decision-making when using an Accounting Information System.
- **H02:** Gender does not significantly relate to the psychological variables influencing investment decisions.
- **H03:** Age has no significant effect on the psychological factors shaping investment choices.
- **H04:** Occupation shows no significant relationship with psychological dimensions of investment behavior.
- **H05:** Investment experience does not significantly influence psychological factors affecting decision-making.

### **Research method:**

The present investigation adopted a descriptive design, aiming to outline and interpret behaviors, perceptions, and patterns among equity investors without manipulating any variables. The target population consisted of individuals engaged in stock market activities, with a sample of 270 retail investors selected through convenience sampling. These participants represented ordinary traders who make independent buy-and-sell decisions, as opposed to institutional investors such as banks or mutual funds. Data collection was carried out through a structured questionnaire that ensured consistency across all responses, allowing for straightforward comparison and analysis. In addition to primary data from surveys, secondary materials such as market reports, news articles, and relevant literature were reviewed to provide additional context and validation of findings.

The dataset was processed and analyzed using SPSS software, which facilitated the application of descriptive statistics, correlation tests, and regression models. This approach enabled the researchers to uncover trends, measure associations, and evaluate relationships among the variables under study, ensuring the results were both rigorous and reliable.

### Analysis and discussion:

CFA of Psychological factors

Table No.1 Regression Weights

		Estimate	S.E.	C.R.	P	Label
HAPPY	<--- mood	1.000				
ACTIVE	<--- mood	0.841	0.223	3.781	***	par_1
POSITIVE	<--- Emotions	1.000				
PROFIT	<--- Emotions	1.037	0.116	8.905	***	par_2
LOSS	<--- Emotions	0.968	0.122	7.900	***	par_3
SPECULATIVE	<--- Gambling	1.000				
PAINFUL	<--- Gambling	1.007	0.162	6.220	***	par_4
FAMILIARITY	<--- Heuristic	1.000				
PASTWINNER	<--- Heuristic	1.070	0.126	8.479	***	par_5
OVERESTIMATES	<--- Heuristic	0.973	0.126	7.722	***	par_6
LOW	<--- Heuristic	0.864	0.149	5.795	***	par_7
CONFIDENT	<--- Personality	1.000				
KNOWLEDGE	<--- Personality	1.596	0.309	5.161	***	Par_8
RISKY	<--- Personality	1.636	0.323	5.060	***	par_9
HESITATE	<--- Personality	1.558	0.310	5.029	***	par_10
BOOKLOSS	<--- Gambling	0.909	0.161	5.643	***	par_11

(Source; Researcher's Output)

Table No.2 Results of Goodness of Fit for Overall Model

Model	CMIN	P value	CFI	RMSEA
Study Model	1.590	0.000	0.902	0.110

Table No.2 shows the values of goodness of fit indices and all indices meet the recommended values.

### Confirmatory Factor Analysis (CFA)

The CFA results confirmed that the psychological dimensions under study—mood, emotions, gambling orientation, heuristics, and personality—were well represented by their observed indicators. All factor loadings were statistically significant, and critical ratios exceeded recommended thresholds, confirming construct validity. The goodness-of-fit indices suggested an acceptable model, with the CFI surpassing 0.90. Although the RMSEA was slightly higher than the ideal cutoff, it remained within the tolerable range for behavioral studies. These findings are consistent with earlier behavioral finance research, which has frequently observed that psychological traits can be grouped into coherent categories that reliably predict decision tendencies (Bihari et al., 2025; Maheshwari & Samantaray, 2025).

### Regression Results taking Decision making as dependent variable.

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.688 <sup>a</sup>	0.489	0.431	0.83091	1.795

- a. Predictors: (Constant), Temper, Betting, Attitude, Heuristic, Feelings  
b. Dependent Variable: decision-making

### Regression Analysis

When decision-making was taken as the dependent variable, the regression model explained nearly half of the observed variance ( $R^2 \approx 0.49$ ), a result that highlights the substantial influence of psychological constructs. Among the predictors, **betting orientation, heuristics, and attitude** emerged as the strongest positive contributors, suggesting that speculative behavior, reliance on shortcuts, and personal outlooks drive investor choices. By contrast, **temper showed a negative effect**, indicating that unstable moods undermine rational decisions, while **feelings were not statistically significant**, meaning that short-term emotions may not consistently affect investment outcomes.

These findings align with studies that highlight overconfidence, gambling tendencies, and heuristics as dominant forces in shaping financial behavior (Tran Thanh Thuy, 2025; Bihari et al., 2025). At the same time, the limited role of transient emotions resonates with research suggesting that deeper, more stable traits carry more weight in financial contexts than momentary feelings (Maheshwari & Samantaray, 2025).

### ANOVA<sup>a</sup>

Model	Sum of square	Df	Mean Square	F	Sig.
1 Regression	29.084	5	5.817	8.425	0.000 <sup>b</sup>
Residual	30.378	44	0.690		
Total		49			

### CMIN

Model	NPAR	CMIN	DF	P	CMIN/DF
Default model	17	40.352	10	0.000	4.035
Saturated model	27	0.000	0		
Independent model	12	73.261	15	0.000	4.884

### Regression weights (Group number 1- Default model)

	Estimate	S.E.	C.R.	P
Decision making <--- Temper	- 0.279	0.091	- 3.074	0.002
Decision making <--- Feelings	- 0.091	0.105	- 0.866	0.386
Decision making <--- Betting	0.737	0.136	5.414	***
Decision making <--- Heuristic	0.684	0.109	6.302	***
Decision making <--- Attitude	0.701	0.153	4.585	***

### Squared Multiple Correlations: (Group number 1- Default model)

	Estimate
Decision making	0.672

The ANOVA tests assessed whether demographic characteristics moderated psychological influences on decision-making. Across all models, the F-values remained below the critical threshold, and the p-values were consistently above 0.05. For instance, **gender** showed no significant differences across psychological dimensions such as attitude ( $F = 0.776$ ,  $p = 0.383$ ) or heuristics ( $F = 0.003$ ,  $p = 0.956$ ). Similarly, **age, occupation, income, and market experience** were not found to significantly impact any of the psychological constructs.

Although age appeared to approach borderline significance for the *feelings* factor ( $F = 2.222$ ,  $p = 0.098$ ), the result still does not reach the conventional threshold of 0.05, meaning it cannot be considered statistically meaningful. Overall, these results confirm that demographic variables do not moderate the effects of psychological factors. Therefore, hypotheses H02, H03, H04, and H05 are accepted.

#### Anova Results- F statistics

Impacting variable	Gender		Age		occupation		Income		Experience in Market	
Dependent Variable	F value	P value	F value	P value	F value	P value	F value	P value	F value	P value
Attitude	0.776	0.383	1.054	0.738	1.085	0.365	0.269	0.847	0.086	0.967
Heuristics	0.003	0.956	0.239	0.868	0.506	0.680	1.298	0.286	0.125	0.945
Betting	0.086	0.770	0.427	0.734	1.350	0.270	1.822	0.156	0.605	0.615
Feeling	0.010	0.920	2.222	0.098	1.576	0.208	0.479	0.698	0.530	0.664
Temper	0.189	0.666	0.347	0.791	0.438	0.727	1.738	0.172	0.464	0.709

The ANOVA analysis explored whether demographic factors moderated psychological influences on decision-making. Across gender, age, occupation, income, and market experience, no significant variations were observed. All F-values were below critical levels, and p-values exceeded the 0.05 threshold. These results confirm that **psychological influences operate consistently across demographic categories**, meaning that biases such as reliance on heuristics or speculative tendencies are not limited to specific groups of investors.

This outcome corresponds with prior evidence suggesting that while demographics may explain access to resources or financial literacy, they do not fundamentally alter behavioral biases (Alquhaif & Al-Mamary, 2025). Instead, cognitive shortcuts and emotional tendencies appear to be universal, affecting investors regardless of their backgrounds.

Taken together, the consistently low F-statistics and high p-values confirm that **psychological drivers of decision-making operate independently of demographic characteristics**. This outcome supports hypotheses H02, H03, H04, and H05, indicating that factors such as gender, age, profession, income, and investment experience do not moderate the influence of psychological constructs on financial decision-making.

#### Discussion of Findings

Overall, the results demonstrate that psychological biases play a decisive role in investment decision-making, even when supported by structured systems such as AIS. Betting orientation, heuristics, and attitudes significantly enhance predictive power, while temper reduces rationality, and short-term feelings remain inconsequential. Importantly, the lack of demographic influence confirms the universality of these biases.

These findings reinforce the central claim of behavioral finance: that investors' decisions are shaped as much by psychology as by information quality. Moreover, they suggest that the presence of AIS may improve data reliability, but it does not fully eliminate the behavioral distortions that influence judgment. This echoes previous scholarship showing that even technologically advanced tools must be complemented by awareness of investor psychology to promote rational decision-making.



## Findings

1. there exhibits 5 psychological factors which are influencing investment decision making When Using Accounting Information System.
2. there is significant relationship between psychological factors and decision making when using accounting information system.
3. Demographics variables are not influencing psychological factors in any manner.

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