

# Influence of Big Five Personality Traits on Equity Investment Decisions: A Descriptive Study in South Gujarat

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## Abstract

This study examines how the Big Five personality traits – Neuroticism, Extraversion, Conscientiousness, Openness, and Agreeableness – influence equity investment decisions among individual investors in South Gujarat, India. A descriptive survey of N=727 investors was conducted with results analyzed using descriptive statistics. The findings reveal distinct behavioral tendencies: highly neurotic investors exhibit pronounced anxiety and risk aversion; extraverted investors rely on social networks and display greater risk tolerance; conscientious investors prefer safe, well-researched options; open investors pursue diverse new opportunities; and agreeable investors show optimistic yet moderate trust in advice. These patterns highlight the significant role of personality in investor behavior in South Gujarat. The paper discusses implications for financial advisors and investors and suggests directions for further research.

## Keywords:

Behavioural finance, Big Five personality traits, investment behaviour, equity investors

## 1. Introduction:

Investment decisions are not solely driven by rational financial considerations; the investor's psychology also plays a crucial role. The **Big Five** personality traits – Neuroticism, Extraversion, Conscientiousness, Openness to Experience, and Agreeableness – have been widely studied in behavioral finance as factors influencing risk perception and decision-making. Recent research shows that personality traits correlate with investors' risk preferences and market belief. For instance, a large-scale study found that highly neurotic individuals and those low in openness allocate significantly less to equities, whereas more open personalities embrace equity investment. Such evidence underscores that who an investor *is* psychologically can influence how they invest.

South Gujarat, a prosperous and entrepreneurial region of India, provides a unique setting to explore these personality effects on investing. Yet limited research has focused on investors in this area. This study addresses that gap by analyzing how each Big Five trait manifests in the equity decisions of South Gujarat's investors, yielding insights for tailored advice and education.

## 2. Literature Review

Behavioural finance literature highlights that investors are influenced by a variety of cognitive biases and personality-driven tendencies.

Barberis et al (2001) included prospect theory in a model of asset prices. Barberis & Huang (2001) compared two forms of mental accounting by incorporating loss aversion and narrow framing into two asset-pricing frameworks: individual stock accounting and portfolio accounting. The former was the more successful one.

Gigerenzer & Selten (2001) edited "Bounded Rationality: The Adaptive Toolbox", a collection of research papers which promoted bounded rationality as the key to understanding how individual investors made decisions.

Shapira & Venezia (2001) analyzed the investment behavior of the clients in a major brokerage firm in Israel. The behavior of the clients who made independent investment decisions were compared to those clients whose account was managed by the brokerage professionals. The results showed that the disposition effect was higher for individual investors and the professionally managed accounts were more diversified in investment and had earned slightly higher returns compared to the independent investors.

Shefrin (2002) identified three main themes in behavioural finance explained as follows:

**a. Heuristics** – People often make decisions based on approximate rules of thumb, not strictly rational analyses.

**b. Framing** – The way a problem or decision is presented to the decision maker will affect his reaction.

**c. Market inefficiencies** – There are explanations for observed market outcomes that are contrary to rational expectations and market efficiency. These include mispricing, non-rational decision making, and return anomalies.

Gilovich et al (2002) edited “Heuristics and Biases: The Psychology of Intuitive Judgment”, a book that compiled the most influential research studies on heuristics and biases tradition since the initial collection in 1982 (Kahneman et al 1982).

Gilovich and Griffin (2002) identified six general purpose heuristics (affect, availability, causality, fluency, similarity and surprise) and six special purpose heuristics (attribution substitution, outrage, prototype, recognition, choosing by liking and choosing by default), whilst two heuristics have been superseded: representativeness, (replaced by attribution-substitution) (prototype heuristic and similarity heuristic) and anchoring and adjustment (replaced by the affect heuristic). Studies worldwide have linked Big Five traits to distinctive investment behaviors. Neuroticism (emotional instability) is associated with pessimism and risk avoidance; highly neurotic investors tend to worry about market downturns and often hold fewer equities. In contrast, Openness (curiosity and flexibility) is tied to greater risk tolerance – open investors are more willing to invest in volatile stocks and new opportunities. In a recent U.S. survey, these two traits showed the strongest effects: neuroticism predicted lower stock ownership, while openness predicted higher ownership, a pattern also observed internationally.

Other traits influence investor tendencies in subtler ways. Extraversion (sociability) often correlates with higher trading activity and overconfidence, as extraverted investors may share tips and follow peers, sometimes leading to herd behavior. Conscientiousness (discipline) tends to manifest as cautious, research-intensive investing; conscientious investors prefer well-planned, low-risk strategies and avoid impulsive trades. Agreeableness (cooperativeness) has a mixed effect – while agreeable individuals might trust expert advice more readily, some studies find this trait has little direct impact on investment performance. In emerging markets, these relationships appear to hold. For example, research in Vietnam found conscientiousness and openness positively influenced investors’ portfolio outcomes, and a study in Kazakhstan noted that personality traits shape risk tolerance, which in turn affects investment choices.

### 3. Research Gap

Few studies have examined how personality traits influence investors in South Gujarat or similar regional contexts. Existing literature has largely focused on Western markets or pan-India analyses, leaving a gap in understanding local nuances. This study fills that gap by providing a descriptive analysis of Big Five traits among South Gujarat investors and highlighting how these traits coincide with particular investment attitudes and behaviors in the regional context.

#### 4. Objectives

- To examine the Big Five personality traits of equity investors in South Gujarat.
- To analyze the influence of each trait on investment behavior in this regional context, and relate the observed patterns to established behavioral finance concepts.

#### 5. Research Methodology

The study followed a **descriptive survey** design. A structured questionnaire was administered to **727** individual investors in South Gujarat who participate in equity markets. The questionnaire included statements reflecting investment behaviors linked to each Big Five trait, rated on a 5-point Likert scale (1 = strongly disagree, 5 = strongly agree). For example, a Neuroticism-related item was “I get nervous immediately when the market is weakening”, gauging the respondent’s anxiety in market downturns. Responses were aggregated to compute descriptive statistics. For each item, we calculated the mean and standard deviation, and the percentage of investors who agreed or disagreed. No inferential analyses (e.g., regression or clustering) were performed, as the focus was on summarizing trends in the data.

#### 6. Analysis

##### 6.1 Descriptive analysis of Big Five Personality Traits of Investors

The big five personality traits of the investors analysed and the results are presented as below.

##### 6.1 Descriptive analysis of Neuroticism Trait of Investors

The personality trait of neuroticism of investors is analysed and the results are presented in Table 6.1.

**Table 6.1:** Descriptive Statistics of Neuroticism Trait of Investors

Descriptive Statistics										
						N	Min	Max	Mean	S.D
get nervous immediately when market being weaken						727	1	5	3.72	1.273
think to give up from stock market when decision is getting wrong						727	1	5	3.15	1.041
very hard for me to settle after setbacks in stock market						727	1	5	3.12	1.042
Items	S.A	A	N	DA	SDA	Total				
get nervous immediately when market being weaken	248 (34.1)	220 (30.3)	133 (18.3)	56 (7.7)	70 (9.6)	727 (100)				
think to give up from stock market when decision is getting wrong	45 (6.2)	256 (35.2)	259 (35.6)	100 (13.8)	67 (9.2)	727 (100)				
very hard for me to settle after setbacks in stock market	76 (10.5)	164 (22.6)	307 (42.2)	130 (17.9)	50 (6.9)	727 (100)				

*Note: The figures in the parentheses are per cent to total*

The results show that more than 64.4 per cent of investors agree and that they will get nervous immediately when market being weaken. This trait of the individual investors is not in the line of theory ‘Value Investing’

propounded by Benjamin Graham & David Dodd and followed by legendary investor Warren Buffet. (Benjamin Graham 1934). The results indicate that 41.4 per cent of investors agree and followed by neutral 35.6 per cent that think to give up from stock market when decision is getting wrong followed by strongly agree (6.20 per cent) and Agree (35.20 per cent). In this process, individual investors are becoming more anxious and take wrong investment decisions.

It is observed that 33.1 per cent of investors agree and followed by Neutral 42.2 per cent that they feel hard to settle after setback in stock market. This is in line with the 'Prospect theory' formulated by (Daniel Kahneman & Amos Tversky 1979). They found that contrary to expected utility theory, investors placed different weights on pain of losses and gain on different ranges of probability. They found that individual investors were much more distressed by prospective losses than they were happy by equivalent gains. It is concluded that individual investors typically consider the loss of Re.1 twice as painful as the pleasure received from a Re.1 gain.

## 6.2 Descriptive analysis of Extraversion Trait of Investors

The personality trait of extraversion of investors is analysed and the results are presented in **Table 6.2**

**Table 6.2** : Descriptive Statistics of Extraversion Trait of Investors

Descriptive Statistics					
	N	Min	Max	Mean	S.D
My investment in stock market are all from attention drawn from my friends/ advisors by lots of discussion	727	1	5	3.17	1.086
You buy shares of Rs.100 and after few days it is being traded at Rs. 70. In this situation you will buy more shares to bring down your average	727	1	5	3.26	1.108
Ups and downs in market is general and it is not matter of	727	1	5	3.17	1.090

Items	S.A.	A	N	DA	S.DA	Total
My investment in stock market are all from attention drawn from my friends/ advisors by lots of discussion with them	73 (10.00)	231 (31.8)	222 (30.5)	150 (20.6)	51 (7.0)	727 (100)
You buy shares of Rs.100 and after few days it is being traded at Rs. 70. In this situation you will buy more shares to bring down your average	105 (14.4)	203 (27.9)	242 (33.3)	130 (17.9)	47 (6.5)	727 (100)
Ups and downs in market is general and it is not matter of	74 (10.2)	228 (31.4)	222 (30.5)	151 (20.8)	52 (7.2)	727 (100)

Note: The figures in the parentheses are per cent to total

It is apparent that about 41.80 per cent of investors agree and followed by neutral of 30.5 per cent and disagree of 27.6 percent that they investment in stock market are all from attention drawn from my friends/ advisors by lots of discussion with them.

It is clear that 42.3 per cent of investors agree that they buy shares of Rs.100 and after few days it is being traded at Rs. 70. In this situation you will buy more shares to bring down your average followed by neutral (33.3 per cent) and disagree 26.4 per cent). The investors try to bring down the purchase cost of the stock by investing more on the same stock. This strategy may not be correct all the time, because the particular stock price may be depreciating due to fundamental reasons like fall in sales or profit.

It reveals that 41.6 per cent of investors agree that Ups and downs in market is general and it is not matter of worry followed by Neutral 30.5 per cent and by disagree 28 per cent . This indicates that individual investors can ready to do investment in any type of market situation without bothering and may take more risk for better return. This is in line with study conducted by Menkhoff et al (2009).

The study suggests that human behaviour is formed by psychological factor and indicates that investor's behaviour is affected by personality, interpretation of information, sentiments, returns and risk.

### 6.3 Descriptive analysis of Conscientiousness Trait of Investor

The personality trait of conscientiousness of investors is analysed and the results are presented in Table 6.3

**Table 6.3 :** Descriptive Statistics Conscientiousness Trait of Investors

Descriptive Statistics					
	N	Min	Max	Mean	S.D.
choose for safe investment and guaranteed return than high risk and high return	727	1	5	3.41	1.008
keep detailed and lots of information before investing in shares	727	1	5	3.51	1.044
Do not accept that I have to take higher risk to improve return	727	1	5	3.29	1.056

Items	S.A	A	N	D.A	SDA	Total
choose for safe investment and guaranteed return than high risk and high return	99 (13.6)	256 (35.2)	238 (32.7)	110 (15.1)	24 (3.3)	727 (100)
keep detailed and lots of information before investing in shares	141 (19.4)	227 (31.2)	245 (33.7)	89 (12.2)	25 (3.4)	727 (100)
Do not accept that I have to take higher risk to improve return	92 (12.7)	228 (30)	271 (37.3)	100 (13.8)	46 (6.3)	727 (100)

*Note: The figures in the parentheses are per cent to total*

The results indicate that about 48.8 per cent of investors agree and followed by Neutral 32.7 per cent that as an investors they like to choose for safe investment and guaranteed return than high risk and high return.

It reveals that 50.60 per cent of investors agree followed 33.7 per cent neutral by that they will keep detailed and lots of information before investing in shares .

It apparent that 42.7 per cent of investors agree followed by 37.3 per cent neutral and only 20.1 per cent with disagree that they have to take higher risk to improve return. This indicates that the investors are risk averse, and they are not ready to take more risk to earn more returns.

#### 6.4 Descriptive analysis of Openness Trait of Investor

The personality trait of openness of investors was analysed and the results are presented in Table 6.4

**Table 6.4:** Openness Trait of Investor

Descriptive Statistics					
	N	Min	Max	Mean	S.D.
Share price of all IT companies are doing well in the market . Fairly a new company is coming out with IPO with heavy premium. Since all IT companies are doing well, I will definitely apply for this IPO.	727	1	5	3.24	1.122
have invested in many investment alternatives like equity share, fixed deposits, post office schemes, insurance, etc.	727	1	5	3.42	1.053
always update myself with new investment options coming in market	727	1	5	3.46	.968

Items	S.A	A	N	DA	SDA	Total
Share price of all IT companies are doing well in the market . Fairly a new company is coming out with IPO with heavy premium. Since all IT companies are doing well, I will definitely apply for this IPO.	92 (12.7)	225 (30.9)	235 (32.3)	113 (15.5)	62 (8.5)	727 (100)
I have invested in many investment alternatives like equity share, fixed deposits, post office schemes, insurance, etc.	111 (15.3)	250 (34.4)	235 (32.3)	95 (13.1)	36 (5.0)	727 (100)
always update myself with new investment options coming in market	107 (14.7)	246 (33.8)	267 (36.7)	89 (12.2)	18 (2.5)	727 (100)

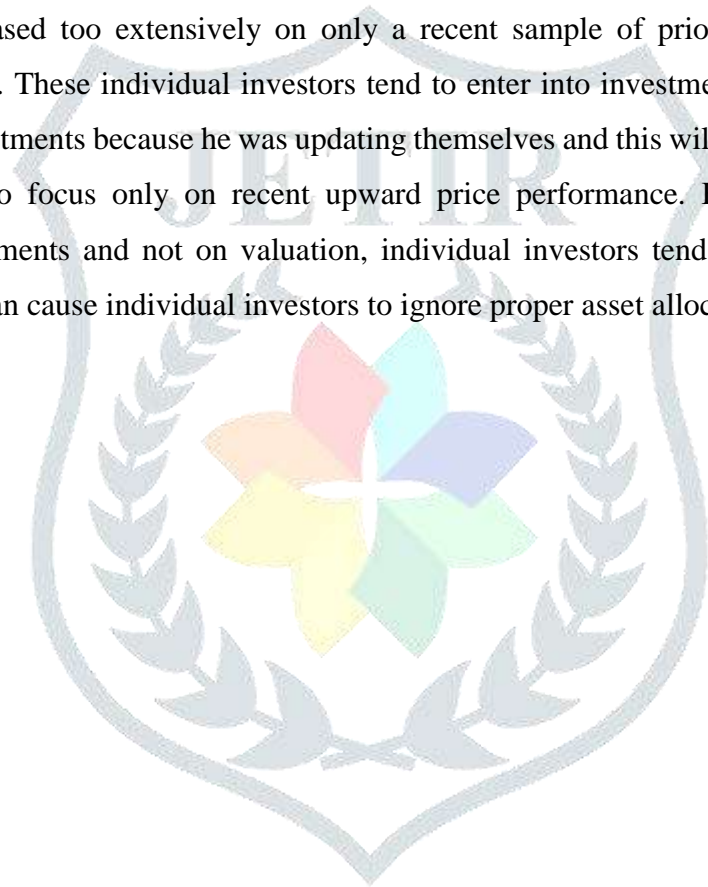
*Note: The figures in the parentheses are per cent to total*

It is observed that 43.6 per cent of investors agree followed by Neutral of 32.3 and disagree only 24 per cent that share prices of all companies of IT are doing well in the market, a fairly new IT is coming out with IPO with heavy premium. Since all IT companies are doing well, they will definitely apply for this IPO. This shows the 'Financial cognitive dissonance' theory. Theory of cognitive dissonance states that people feel internal

tension and anxiety when subject to conflicting beliefs. Individuals attempt to reduce their inner conflict in one or two ways one People change their past values, feelings or opinions or second they attempt to justify or rationalize their choice. This theory also applies to investors in the equity market who attempt to rationalize contradictory behaviours.

The results show that about 49.7 per cent of investors agree followed by 32.3 percent Neutral and only 18.1 per cent disagree that they invest in well diversified portfolio consisting of equity, fixed deposits, insurance, post office schemes etc. This shows that the individual investors try to hold diversified portfolio contrary to the general belief that individual investors hold concentrated portfolio according to Barnewall M.M. He also found that most of the individual investors held undiversified portfolio (Barnwell 1999).

It is clear that 48.5 per cent of investors agree followed by Neutral 36.7 per cent and disagree only by 14.7 per cent that they always update themselves with new investment options coming in market. Investors who forecast future returns based too extensively on only a recent sample of prior returns are vulnerable to purchasing at price peaks. These individual investors tend to enter into investments sometime in the wrong time and losing their investments because he was updating themselves and this will cause an investor to ignore fundamental value and to focus only on recent upward price performance. By focusing only on price movements of the investments and not on valuation, individual investors tend to loss the principal. This emotional phenomenon can cause individual investors to ignore proper asset allocation.



### 6.5 Agreeableness Trait of Investor

The personality trait of agreeableness of investors is analysed and the results are presented in Table 6.5

**Table 6.5:** Agreeableness Trait of Investor

Descriptive Statistics					
	N	Min	Max	Mean	S.D
independent and interested in choosing variety of shares	727	1	5	3.41	1.023
Able to find opportunity to get good return even market is weak.	727	1	5	3.38	1.082
I trust what my advisor or other suggest for any investment option	727	1	5	3.21	.964
I am attentive , thoughtful and calculative in investment decision	727	1	5	3.43	1.044

Items	SA	A	N	DA	SDA	Total
I am independent and interested in choosing variety of shares	101 (13.9)	255 (35.1)	240 (33.0)	101 (13.9)	30 (4.1)	727 (100)
able to find opportunity to get good return even market is weak.	119 (16.4)	223 (30.7)	237 (32.6)	112 (15.4)	36 (5.0)	727 (100)
trust what my advisor or other suggest for any investment option	65 (8.9)	203 (27.9)	316 (43.5)	109 (15.0)	34 (4.7)	727 (100)
I am attentive , thoughtful and calculative in investment decision	121 (16.6)	228 (31.4)	246 (33.8)	105 (14.4)	27 (3.7)	727 (100)

The results indicate that about 49 per cent of investors agree followed by 33.0 Neutral and only 18 per cent disagree that they are independent and interested in choosing variety of shares.

It is observed that 47.1 per cent of investors agree followed by 32.6 per cent Neutral and only 20.4 per cent disagree that they able to find opportunity to get good return even market is weak and do have full control in picking investments that will outperform the market. This leads the tendency of overconfidence among the individual investors in the Indian equity market. This is in line with the study conducted by Barber and Odean. The result of their study also indicates widespread and consistent tendency of overconfidence prevailed among the investors. (Barber and Odean 2001)

It is clear that 48.00 per cent of investors agreed followed by only 18 per cent investors disagree that they are attentive, thoughtful and calculative in investment decision.

It is also observed that 36.8 per cent of investors agree followed 43.5 per cent Neutral and only 19.7 per cent disagree that they trust what their advisor or other suggest for any investment option

## 7. Findings :

The analysis indicates that personality traits significantly influence investment behaviour among equity investors. Investors with higher levels of neuroticism tend to experience anxiety during market fluctuations and are more sensitive to potential losses, which often results in cautious behaviour or a tendency to withdraw during market downturns. Extraverted investors, on the other hand, display greater confidence and social involvement in investment decisions; they are more willing to take risks and are influenced by discussions with peers and market sentiment, sometimes leading to herd behaviour or overconfidence. Investors high in conscientiousness follow a disciplined and systematic approach, preferring safer investment avenues, conducting thorough research, and avoiding speculative or impulsive decisions. Those with a high level of openness to experience are inclined towards diversification and are willing to explore new investment opportunities; however, they must be cautious not to rely excessively on recent trends. Agreeable investors exhibit a balanced investment style, characterised by optimism and cooperation; while they are receptive to advice and external opinions, they generally retain independent judgment in their final investment decisions.

## Conclusion

This descriptive study demonstrates that personality traits significantly shape the investment behavior of individual investors in South Gujarat. Neuroticism contributes to greater caution and sensitivity to losses; Extraversion is associated with socially influenced, risk-tolerant behavior; Conscientiousness results in careful, methodical investing; Openness drives exploratory and diversified investment choices; and Agreeableness produces an investor who is optimistic and cooperative yet not overly credulous. These outcomes align with broader behavioral finance findings and affirm that psychological factors are a key component of investor decision-making, even within a specific regional market. Recognizing trait-driven tendencies helps explain why investors make certain choices and how they might react under different market conditions.

## 8. Implications

- **For Advisors:** Tailor advice to client personalities. For example, provide extra reassurance and conservative options to anxious (neurotic) investors, and temper the enthusiasm of overly confident (extraverted or open) investors with risk management strategies.
- **For Investors:** Self-awareness of one's personality can improve decision-making. Investors should acknowledge their biases – e.g., an extravert might set rules to avoid impulse trades, while a highly conscientious person may need to ensure caution doesn't lead to missed opportunities.
- **For Education:** Financial literacy programs in South Gujarat should address common biases linked to prevalent traits (such as loss aversion in neurotics or herd behavior in extraverts) and promote strategies to mitigate them.

## 9. Scope for Further Research

Investigate whether these trait-behavior patterns hold in other regions or investor groups, to understand the role of cultural context. Examine how these personality-driven behaviors ultimately impact investment success or portfolio performance among investors. Explore if personalized interventions (like advisory approaches or decision aids tailored to personality types) can help investors make better decisions and overcome bias.

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