

**Behavioral Biased Judgment on Investment Decision in Material Gold by Investors in Chennai –  
India**

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**Abstract**

*The behavioral finance is biased behavior of investor decision making over investment, the irrationality in investment judgment linked with traditional material gold bind up with emotional incidents leads to behavioral biases. The study is to identify the relationship between qualification of an investor and the behavioral biases influence on decision making of material gold investment and also study has been performed to identify the personality traits involved in the behavioral biased judgment of decision making on investing funds on material gold. The correlation analysis has been made to find out the relation that exists between qualification and behavior biases of individuals and also factors listed out for biased personality traits. The sampling unit has been taken on 123 samples in all profiles. The concluding observation is that there is no relationship between qualification of an investor and the behavioral biases influence on decision making of material gold investment and the study reveals that there are three elements biased behavior based on personality traits consists of cognitive biases, incidental emotional biases and inherits emotional biases.*

**Keywords:** *Behavior Biases, Cognitive biases, Decision making, emotional biases and Personality Traits*

**Introduction**

The term behavioral finance clarify the illogical irrational decision making made by investors on investment, such biased behavior has been challenge on global market as human instinct is hard to convince rationally (Brad 2016), when the instinct related to something bind up with the culture and tradition its next to impossible to separate irrationality from the behavior. Gold is one such element which connects the individual emotions on almost every occasion held, the shiny yellow metal tent to gain popularity did not lose the glory for generations was bound up with emotional psychology more than the investment. The interpretation of investment and gold fusion form automatic bias inherited personality traits. The personality traits has plays significant role over the biases based on the location, peer group, emotion, and many more components involved in the judgment some of which are:

**Anchoring effect:** The initial knowledge over the investment leads to the judgment on the performance and decision making has been made with that biased limited knowledge.

**Representative biases:** The similarities of events which may or may not connect with the issue induce into thinking about the future outcome.

**Loss aversion:** Risk of loss raises fear in investment and restricts the fund towards certain heuristic investment.

**Overconfidence:** The superiority of self-confidence over the knowledge of investment leads to binding investment without much study on the current scenario in the market.

**Availability biases:** The knowledge gained by available pieces of information rather than deep acknowledgement over the issue and judgmental decision.

### **Literature Review**

**Alex Paul** (October 2020) in his study has briefed the cognitive biased decision has been taken by the investors on the investment over multi vary reasons, the demographic profile have vanity role as the time span they travel investors prefer for safer principal rather than earning profit. The seniority they grip in the investment field leads to better knowledge and awareness on the investment cycle explains the qualification of the individual gives better clarification on the investment decision. According to **Keerthika.R and DrAnlisuresh** (April 2020) concluded in the study that gender have different role on investing in material gold, over the personality traits different biases has been influenced to choose the solid form of gold as the investment of their savings. The author also revealed the alarm state on the investors which left them in search of solid touch and feel assurance on the money they put in to use that make them to hold the sensor on shining yellow metal. The research proceed by **Sri UtamiAdy** (2018) has suggested multiple psychological reasons over the biased decision of investors which was often triggered by the peer group they surrounded through the anchoring effects, the personality traits has been induced by the various reason such as over confidence, rumors, financial advisors and social group, even personal depression can lead to the biased decision which can be furnished by constant practice and update learning and understanding over the market. **Sri UtamiAdy** (2018) on the research have analyzed the importance of behavioral stability on the investment decision making process as the investment is key which spread the comfort ability not only with investors but also the surrounding, the research has pin pointed towards the investors investment pattern also influence the reflection on the life goal, as life goal is synchronizing element of subjectivity and objectivity understanding towards the moral values. **ShoaibIrshad, WaqarBadshah, UsmanHakam** (2016) conducted study on Islamabad stock exchange has concluded the investment made by the investors

are biased as the sunk cost fallacy get in to effect on decision making of investors, individual tent to analyses the performance of investment with the past performance and biased judgment made on future forecast of investment are represented.

### Research Gap

The study has to deal with personality traits and biased behaviors of investors are highly volatile, the material gold is treated as custom rather than investment made the technical analysis part quite rigid as the literature over the biases on material gold was very few has made the literature part time taken.

<b>Table 1- Study Plan</b>	
<b>Research Design</b>	Descriptive, qualitative, investigative and expressive research design
<b>Sampling Process</b>	Convenience Sampling
<b>Sampling Unit</b>	Personality traits, cognitive biases, material gold
<b>Respondents</b>	123
<b>Research Instrument</b>	Electronic format of questionnaire with scored using a five-point Likert scale
<b>Response Collected</b>	Digital mode approach to through mail and other form of texting communication
<b>Analytical Study</b>	Exploratory analysis, Component Matrix analysis and Correlation test
<b>Source: Compiled by the authors</b>	

Table 1 consists of the study plan taken in course of research inclusive of design of the research, method of sampling and units taken for sample along with quantity of respondents, instruments used to collect sample, tools and techniques used in the study.

### Research objective

The prima fascia of the study is to identify depth knowledge of investment of investors on material gold when multiple options available in the global market, as study said India is one of the largest private investors market in gold with more popularity to the versatile metal (Anlisuresh 2011). The behavioral biases held on investor personality on judgment of material gold and influence of personality traits over the decision making.

### Objectives of the study

1. The study conducted to identify relationship exists between qualification of an investor and the behavioral biases influence on decision making of material gold investment.
2. The study has been performed to identify the personality traits involved in the behavioral biased judgment of decision making on investing fund on material gold.

### Hypothesis of the study

**H<sup>o</sup>**- There is no noteworthy difference between experience and cognitive biased judgment on decision making process on gold investment

### Results and discussion

#### i) The frequency analysis performed on demographic profile

<b>Table 2 Demographic profile</b>		
Particulars	Frequency	Percent
18-24	36	29.27
25-31	37	30.08
32-38	26	21.14
39- 45	24	19.51
Total	123	100.00
Particulars	Frequency	Percent
Below Graduation	23	18.70
Graduate	22	17.89
Post Graduate	36	29.27
Others	42	34.15
Total	123	100
Particulars	Frequency	Percent
Male	53	43.09
Female	70	56.91
Total	123	100
Source: Primary data analysis		

The demographic profile containing sampling 29.27% belongs to the age group of 18-24 followed by 25-31 30.08%, 32-38 are 21.14% and 39-45 19.51%. Qualification has been classified as 4 groups below graduate 18.70%, graduate 17.89%, post graduates 29.27% and others 34.15%. The sample contains Male 43.09% and Female 56.91%.

#### ii) Correlation analysis has been performed to reveal the relationship between the investor's qualification and behavioral biased judgment on investing fund on material gold

**H<sup>o</sup>**- There is no noteworthy difference between qualification and Behavioral biased judgment on decision making process on gold investment

		Behavioral biases	Qualification
Behavioral biases	Pearson Correlation	1	-.180*
	Sig. (2-tailed)		.046
	N	123	123
Qualification	Pearson Correlation	-.180*	1
	Sig. (2-tailed)	.046	
	N	123	123
*. Correlation is significant at the 0.05 level (2-tailed).			
Source: Primary data analysis			

The above table correlation analysis is performed to know the relationship between the qualification of individual and cognitive biases judgment on decision making of material gold investment, the correlation test reveals the strong negative correlation exist between qualification of individual and cognitive biased judgment on material gold investment which is the higher the qualification the limited biases hold on the judgment of decision making. The significant value .046 which is lesser than 0.05 rejects the null hypothesis that is there is noteworthy difference exist between the qualification and cognitive biased judgment on decision making of material gold.

#### **KMO and Bartlett's Analysis to evaluate the accuracy of the sample to identify the behavioral bias judgment in decision making of material gold**

KMO Measure of Sampling Adequacy		.856
Bartlett's Test	Approximate Chi-Square	305.394
	Degree of freedom	55
	Significant	.000
Source: Primary data analysis		

The KMO and Bartlett's test has been performed to reveal the study contains 85.6% sampling accuracy.

**ii) Factor analysis performed to identify the components that Contribute toward behavioral biased judgment on investing of material gold**

<b>Table 4.1 Component Matrix analysis</b>			
	Elements		
	Cognitive bias	Incidental emotional bias	Inherit emotional bias
<b>Overconfidence</b>	<b>.642</b>		
Loss aversion	.556		
Representative biases	.530		
Anchoring effect	.504		
Availability bias	.401		
<b>Societal Pressure</b>		<b>.644</b>	
Horoscopy judgment		.594	
Family pressure		.523	
<b>Rumors</b>			<b>.713</b>
Peer group influence			.667
Fluctuation in market			.593
Extraction Method: Principal Component Analysis.			
Source: Primary data analysis			

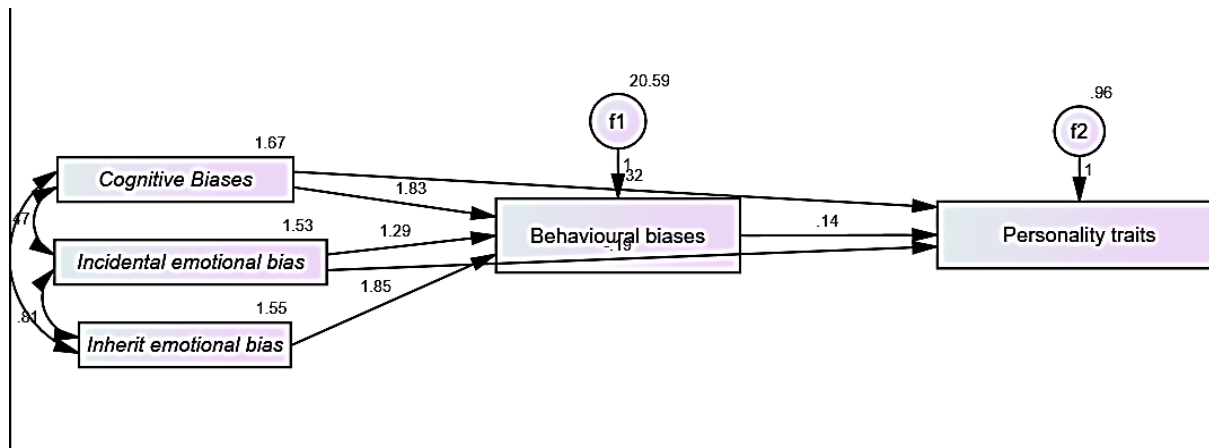
The factor analysis has been classified into three groups based on the biases traits of individuals named as cognitive bias, incidental emotional biases and inherited emotional biases. The first element cognitive biases has lined up factors based on the analysis on which overconfidence (.642) was first bias leads to invest on material gold followed by loss aversion(.556), representative biases(.530), anchoring effect(.504), and availability biases (.401). The second element of the analysis is Incidental emotional biases which has further classified into three factors which societal pressure was ranked first with (.644) followed by horoscopy judgment and family pressure.

Table 4.2 Goodness-of-Fit Results of CFA Model the factors That Contribute toward biases traits of individual									
Goodness of Fit Measures	Chi sq	Df	Chi sq / df	GFI	RMSEA	AGFI	TLI	CFI	NFI
Desired Ranges (Good Model Fit)	p > .05	≥ 0	2- 5	> .90	< .08	> .90	> .90	> .95	> .90
CFA Model	.021	1	2.153	.993	.074	.871	.941	.994	.990

Source: Primary data analysis

A model of goodness of fit was created according to the Benchmark value desired ranges as specified on the above table for the confirmatory factor analysis after addressing model fit issues using modification indices and standardized residual covariance.

Figure 1 Goodness of fit result and confirmatory factor analysis



Source: Primary data analysis

The Goodness of fit result and confirmatory factor analysis model has been revealing the behavioral biased judgment based on the personality of individuals over investment of the fund in material gold.

**Findings from the study**

1. The demographic profile reveals the majority sampling unit taken for study is female under age group of 25-31 with post graduation and other degree.

2. Correlation analysis study explains the **negative correlation exist between the qualification and behavioral biased judgment on decision making in investment of material gold**, with significant value less than 0.05, by rejecting null hypothesis the analysis proved to have relationship exist between the variable by negatively correlating this can be comprehend further as the qualification of investors improves will lead to better understanding on market function and biased behavior over judgment of investment fund on material reduce positively.
3. The factor analysis has classified the biased behavior based on their personality traits into three element **cognitive biases; incidental emotional biases and inherits emotional biases**. The cognitive biases influenced by overconfidence of their knowledge in the market of material gold followed by incidental emotional biases on which societal pressure plays significant role investing on material gold on other hand the third component inherit emotional biases tend to believe rumors over the judgment of decision making. The confirmatory factor analysis has been made to prove the model to be fit.

### **Conclusion and Suggestions**

The study carried to understand the behavioral biases on the investment judgment decision taken on investing fund on material gold, the study clarified the areas of personality traits based on which biases occurred on decision making the cognitive biases was norms which manipulate the rational thinking of investors, in general scenario investors thinks the material investment is safe as that followed traditionally for generation by missing the fact of modern market are fast forward development in world of artificial intelligence, the society pressure and to satisfy the peer group individual tent to go for biased decision making that can be reduced modestly with proper education development in portfolio market through which the knowledge on market function have clarity picture which helps to reduce the biased traits on individual's personality.

### **Scope for future study**

The study can be performed on derivatives of the secondary market and their investor's personality traits on decision making. The study has been restricted to a particular district in Tamilnadu India can be alerted throughout the country. The study can be further performed on cognitive biases and their judgmental skills.

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WE declare that the submitted paper is original research work, which is not been published or submitted for publication elsewhere.