# Investors Behavioral Aspects Towards Investment On Gold
# (With Reference To Visakhapatnam District)

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## Abstract

Behavioral finance, a branch of finance that explores the influence of psychological factors on financial decision making, reveals a significant limitation in traditional finance models. Behavioral finance uses both psychology and finances to explain the rationale behind an investor behavior towards investment decision and also explains the market anomalies. India's favorable demographic patterns, such as its rising affluent middle class and aging population, should ensure robust utilization increase. Beside with these factors, factors such as treating gold as a major investment choice, the use of gold ornaments by the male and younger population, the widespread availability of credit facilities, and the increasing trend of industrial demand all contributed to the increase in gold demand. Consumer spending patterns in India vary significantly from those in the Western world and previous generations of Indians. Consumer preferences, shopping designs, preferred styles of stores and retail scenes, attire and style, and ways of investing their recreation and leisure time are all covered. However, there are particular differences in Indian utilization designs due to fast monetary turn of events. Therefore, the paper largely focuses on the investors behavioral aspects towards the gold investment in the select region and the methodology of the study is purely based on the primary data by conducting survey to identify customers' behavioral aspects on gold investment in the select region.

**Keywords:** Behavioral finance, Demographic patterns, Market anomalies, Gold ornaments.

Decision-making is an art to tackle complex situations. It is a cognitive process to choose an alternate among several possible alternative scenarios. One cannot make a decision by simply relying on his/her personal resources. The result can be a vision or an action of choice. Decision-making without certain planning can be fair but it might not end well. A manager's mental approach mediates the different problems occurring in different steps by analyzing them. Decision-making basically is a unique art to choose a certain alternative from various alternatives available. Moreover we can say that it is a process that is being followed by the alternatives that are thoroughly inspected and evaluated. Managers who want to compete in a challenging business environment must update themselves in many fields so that they can get desired results. It is important to understand that in present competitive global perspective investors must obtain capability to get best results out of their investments. In addition to this, investors should develop persistence and positive vision. Investors differ from one another in different aspects and demographic factors, i.e., socio-economic, education, sex, race

and age. Few believe in more risk more return which is usually risky, whereas others believe in less risk less return which is always safe.

Gold has for some time been a significant part of the Indian family's financial attitude. It has consistently tended to bring out a feeling of social and emotive connection as an item, so recognizing its utilization and interest in India from that of different nations. Gold utilization has been characteristically tied 100% of the time to the monetary desires of Indian families. Gold is constantly remembered for each family's monetary portfolio, whether bought as bullion or adornments, for individual utilization, speculation, or even as a gift. For centuries in India, gold has been the evident and normal decision of putting something aside for all families.

While gold is primarily a monetary asset, it also serves as a commodity. It is the world's oldest foreign currency and a major component of global monetary reserves. India is the world's most populous democratic gold-loving nation. Gold is primarily a monetary asset, although it can also be used as a commodity. Gold is the world's oldest currency and accounts for a significant portion of global monetary reserves. Gold, on the other hand, contributes significantly to the government's current account deficit, an issue that requires further investigation.

Gold has long been an important aspect of the Indian household's socioeconomic mentality. As a commodity, it has always elicited a feeling of cultural and emotive attachment, distinguishing its consumption and investment in India from that of other countries.

During several past years, investments usually based on forecasting, performance, market timing. That used to produce ordinary findings. Huge gap between the returns available and the return received forced the investors to look into the matter and find the reasons. So, the fundamental mistakes during the process of decision-making were identified. In other words, we can say that investors make irrational decisions during their investments and psychological impact was found during these mistakes. Thus the Subject of Behavioral Finance which got popularity in the world of investment decisions and stock markets is not new as the researchers began to work on this field several years ago. Since many years, investors have been considering psychology an important factor while determining the market behavior, but formal studies have only been conducted in recent years in this field of behavioral finance.

Behavioral finance is a field of study that suggests that investment decisions are influenced by psychological and emotional factors to a large extent. Many cognitive biases have been established by psychologists in the process of understanding human behavior and decision making. Some of these are as follows:

Theories, which are based on the psychology, attempt to understand how emotions and cognitive errors influence investors' behaviors.

**Heuristics:** Heuristics are defined as the rules of thumb, which makes decision making easier, especially in complex and uncertain environments by reducing the complexity of assessing probabilities and predicting values to simpler judgments. There are four components of heuristics: representativeness, availability bias, anchoring, and overconfidence.

**Prospect:** Prospect theory focuses on subjective decision-making influenced by the investors' value system. Prospect theory describes some states of mind affecting an individual's decision-making processes including: regret aversion, loss aversion, and mental accounting

**Market:** Financial markets can be affected by investors' behaviors in the way of behavioral finance. If the perspectives of behavioral finance are correct, it is believed that the investors may have over- or under-reaction to price changes or news; extrapolation of past trends into the future; a lack of attention to fundamentals underlying a stock; the focus on popular stocks and seasonal price cycles.

**Herding:** Herding effect in financial market is identified as tendency of investors' behaviors to follow the others' actions. In the perspective of behavior, herding can cause some emotional biases, including conformity, congruity and cognitive conflict, the home bias and gossip. Investors may prefer herding if they believe that herding can help them to extract useful and reliable information.

**Significance of the Study:**

Early investment theories suggest that investors are rational and base their decisions on maximizing returns while limiting the risks. However, recent theories challenge these suggestions and assumptions. Human mind does not always think rationally and neither do the markets always perform efficiently. Psychological factors such as greed and fear among others can influence the investment decisions of people. While rational thinking might suggest that investing in say, the gold market is ideal for a particular kind of investor. However, fear of losing money and having met a peer who has lost money through investment might influence the decision of the investor. Hence, behavioral aspects towards gold investment became an important field of study.

**Statement of the Problem:**

Gold is the oldest foreign currency in the world and a significant component of global monetary reserves. The Indian government is trying to curb gold imports and jewelry investments to curb the current account deficit. However, these measures have had unexpected repercussions, including increased piracy. In this unique situation, a careful assessment of gold's current and expected jobs in India is needed to understand why Indian consumers buy and sell gold, and how they will respond to gold adaptation activities and their gold purchasing behavior.

**Objectives of the study:**

The study was conducted taking into consideration the following objectives:
- To analyze the investors behavioral aspects on gold investment in the select region of study.
- To suggest ways and means for investment decisions in the select region.

**Methodology of the Study:**

The research study is purely based on the primary sources of data through structured questionnaire and a sample size of 386 respondents (customers) of Visakhapatnam District have been taken by the researcher through the method of $Ss = [\ Z^2\ P(1-P)]\ C^2$ when the population is infinite. Finally the data used for the present study was collected from a sample of 386 customers at 99.5% of Confidence level. In this research, the researcher followed a detailed descriptive research to solve the research problem. In the present study, the researcher used different statistical procedures viz., through Hypothesis Testing Cronbach's Alpha Reliability Test, KMO and Bartlett's Test is conducted and the statistical tool Factor analysis is used for analyzing and interpreting the data and results.

**Hypothesis of the Study:**

H1: There is a significant impact of behavioral aspects of Customers towards investment on gold in the select region.
H0: There is no significant impact of behavioral aspects of Customers towards investment on gold in the select region.

Gold has been widely used throughout the world as money, for efficient indirect exchange (versus barter), and to store wealth in hoards. For exchange purposes, mints produce standardized gold bullion coins, bars and other units of fixed weight and purity.

After World War II gold was replaced by a system of nominally convertible currencies related by fixed exchange rates following the Bretton Woods system. Gold standards and the direct convertibility of currencies to gold have been abandoned by world governments, led in 1971 by the United States' refusal to redeem its dollars in gold. Fiat currency now fills most monetary roles. Switzerland was the last country to tie its currency to gold; this was ended by a referendum in 1999. Gold has emotional, cultural and financial value and is bought by different people across the globe for different reasons, often influenced by national socio-cultural factors, local market conditions and wider macro-economic drivers.

The Global Financial Crisis coincided with a significant shift Eastwards in demand for gold. This was driven not only by cultural affinity, but also by wealth creation and income growth in some of the world's most dynamic and rapidly growing economies.

**Key Points**
- Gold demand is strong and enduring.
- Gold is perceived as an investment and an adornment.
- Gold is viewed as a trusted safe haven asset.
- Gold demand persists in good times and in bad.
- Gold supplies in India are constrained by the limited use of recycled gold.
- Gold makes a strong economic contribution to the Indian economy.
- Gold could make a stronger economic contribution and imports could be reduced if gold was more effectively monetized.

Hence, the Investors Behavioral aspects towards Investment on Gold in the select region are studied.

## Reliability
## Scale: ALL VARIABLES

**Table No. 1 Case Processing Summary**

|  |  | N | % |
|---|---|---|---|
| Cases | Valid | 386 | 100.0 |
|  | Excluded[a] | 0 | .0 |
|  | Total | 386 | 100.0 |

a. Listwise deletion based on all variables in the procedure.

**Table No. 1 (a)Reliability Statistics**

| Cronbach's Alpha | N of Items |
|---|---|
| .989 | 16 |

Cronbach's Alpha is a convenient test used to estimate the reliability, or internal consistency, of a composite score. Cronbach's alpha gives us a simple way to measure whether or not a score is reliable. Theoretically, Cronbach's alpha results should give you a number from 0 to 1, the general rule of thumb is that a Cronbach's alpha of .70 and above is good, .80 and above is better, .90 and above is best. Therefore, the table no. 1(a) depicts Cronbach's Alpha which is .989 which is a valid construct. Higher the value more reliable is the construct. For Valid Cronbach's Alpha the minimum value is 0.6. Hence, the construct is valid with a value of .989 for sixteen items which is excellent.

**Table No. 2 KMO and Bartlett's Test**

| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. |  | .931 |
|---|---|---|
| Bartlett's Test of Sphericity | Approx. Chi-Square | 15285.389 |
|  | df | 120 |
|  | Sig. | .000 |

From the table no. 2, the Kaiser – Meyer – Olkin (KMO) would be used to measure the "the sampling adequacy" of the data collected for the factor analysis as this would help the researcher to know if the intended study (variables) is properly being measured, KMO returns values between 0 and 1. A KMO value between 0.8 and 1 indicates the sampling is adequate; therefore the sampling adequacy for the present study stands at .931 which is marvelous.

While the Bartlett's test for sphericity is used for comparisons between correlation matrix and to see if there is any verbose in the measured variables. The Bartlett's test of sphericity is used to test the null hypothesis that the correlation matrix is an identity matrix. A significant statistical test (usually less than 0.05) shows that the correlation matrix is indeed not an identity matrix, so the null hypothesis is rejected.

## Table No. 3 Factor Analysis

**Correlation Matrix**

| | Representation of investment on gold as worthable | Customers are overconfident to have more returns on gold investment | Customers opinion on security towards gold investment | For serious decision making gold investment can be available source of income | Customers opinion on gold investment as loss aversion | Customers opinion on gold as forcible investment for some special occasions | Customers are saving the money in the form of gold investment | Customers feel comfort with the fluctuations in the price of a gold | Customers get the market information on the gold investment | Customers prefer highly on gold investment | Customers decision of other investors on buying and selling of gold | Customers are competent with the other investors on gold investment | Gender | Age | Marital Status | Monthly Income |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Representation of investment on gold as worthable | 1.000 | .869 | .951 | .909 | .966 | .932 | .936 | .880 | .897 | .939 | .869 | .897 | .683 | .935 | .745 | .908 |
| Customers are overconfident to have more returns on gold investment | .869 | 1.000 | .891 | .855 | .909 | .905 | .894 | .924 | .935 | .915 | .947 | .829 | .692 | .880 | .856 | .923 |
| Customers opinion on security towards gold investment | .951 | .891 | 1.000 | .890 | .958 | .938 | .926 | .886 | .910 | .942 | .875 | .881 | .627 | .893 | .734 | .898 |
| For serious decision making gold investment can be available source of income | .909 | .855 | .890 | 1.000 | .905 | .939 | .956 | .834 | .874 | .911 | .838 | .895 | .659 | .832 | .743 | .887 |
| Customers opinion on gold investment as loss aversion | .966 | .909 | .958 | .905 | 1.000 | .953 | .932 | .919 | .918 | .965 | .906 | .870 | .692 | .915 | .787 | .904 |
| Customers opinion on gold as forcible investment for some special occasions | .932 | .905 | .938 | .939 | .953 | 1.000 | .972 | .903 | .935 | .952 | .907 | .869 | .734 | .877 | .809 | .905 |
| Customers are saving the money in the form of gold investment | .936 | .894 | .926 | .956 | .932 | .972 | 1.000 | .874 | .919 | .940 | .893 | .883 | .703 | .879 | .806 | .915 |
| Customers feel comfort with the fluctuations in the price of a gold | .880 | .924 | .886 | .834 | .919 | .903 | .874 | 1.000 | .939 | .905 | .973 | .891 | .842 | .911 | .831 | .945 |
| Customers get the market information on the gold investment | .897 | .935 | .910 | .874 | .918 | .935 | .919 | .939 | 1.000 | .927 | .940 | .890 | .798 | .916 | .785 | .944 |
| Customers prefer highly on gold investment | .939 | .915 | .942 | .911 | .965 | .952 | .940 | .905 | .927 | 1.000 | .890 | .841 | .690 | .902 | .761 | .895 |
| Customers decision of other investors on buying and selling of gold | .869 | .947 | .875 | .838 | .906 | .907 | .893 | .973 | .940 | .890 | 1.000 | .881 | .810 | .899 | .859 | .956 |
| Customers are competent with the other investors on gold investment | .897 | .829 | .881 | .895 | .870 | .869 | .883 | .891 | .890 | .841 | .881 | 1.000 | .777 | .883 | .730 | .952 |
| Gender | .683 | .692 | .627 | .659 | .692 | .734 | .703 | .842 | .798 | .690 | .810 | .777 | 1.000 | .751 | .696 | .801 |
| Age | .935 | .880 | .893 | .832 | .915 | .877 | .879 | .911 | .916 | .902 | .899 | .883 | .751 | 1.000 | .751 | .918 |
| Marital Status | .745 | .856 | .734 | .743 | .787 | .809 | .806 | .831 | .785 | .761 | .859 | .730 | .696 | .751 | 1.000 | .802 |
| Monthy Income | .908 | .923 | .898 | .887 | .904 | .905 | .915 | .945 | .944 | .895 | .956 | .952 | .801 | .918 | .802 | 1.000 |

Factor analysis is a technique that is used to reduce a large number of variables into fewer numbers of factors. This technique extracts maximum common variance from all variables and puts them into a common score. Several methods are available, but principal component analysis is used most commonly. PCA starts extracting the maximum variance and puts them into the first factor. After that, it removes that variance explained by the first factors and then starts extracting maximum variance for the second factor. This process goes to the last factor.

It is examined from the table no.3, with 16 input variables, PCA initially extracts 16 components. Each component has a quality score called an Eigenvalue. Only components with high Eigenvalues are likely to represent real underlying factors.

### Table no. 4 Communalities

|  | Initial | Extraction |
|---|---|---|
| Representation of investment on gold as worthable | 1.000 | .912 |
| Customers are overconfident to have more returns on gold investment | 1.000 | .899 |
| Customers opinion on security towards gold investment | 1.000 | .899 |
| For serious decision making gold investment can be available source of income | 1.000 | .863 |
| Customers opinion on gold investment as loss aversion | 1.000 | .936 |
| Customers opinion on gold as forcible investment for some special occasions | 1.000 | .938 |
| Customers are saving the money in the form of gold investment | 1.000 | .926 |
| Customers feel comfort with the fluctuations in the price of a gold | 1.000 | .926 |
| Customers get the market information on the gold investment | 1.000 | .937 |
| Customers prefer highly on gold investment | 1.000 | .920 |
| Customers decision of other investors on buying and selling of gold | 1.000 | .925 |
| Customers are competent with the other investors on gold investment | 1.000 | .866 |
| Gender | 1.000 | .628 |
| Age | 1.000 | .888 |
| Marital Status | 1.000 | .712 |
| Monthy Income | 1.000 | .940 |

Extraction Method: Principal Component Analysis.

From the table no.4 reveals that the proportion of each variable's variance that can be explained by the factors. Communality can be defined as the sum of squared factor loadings for the variables. In PCA and Factor Analysis, a variable's **communality** is a useful measure for predicting the variable's value. More specifically, it tells what proportion of the variable's variance is a result. A variable's communality ranges from **0 to 1.**

**Table no. 5 Total Variance Explained**

| Component | Initial Eigenvalues | | | Extraction Sums of Squared Loadings | | |
|---|---|---|---|---|---|---|
| | Total | % of Variance | Cumulative % | Total | % of Variance | Cumulative % |
| 1 | 14.113 | 88.209 | 88.209 | 14.113 | 88.209 | 88.209 |
| 2 | .614 | 3.836 | 92.045 | | | |
| 3 | .373 | 2.329 | 94.374 | | | |
| 4 | .240 | 1.497 | 95.871 | | | |
| 5 | .180 | 1.125 | 96.996 | | | |
| 6 | .147 | .916 | 97.913 | | | |
| 7 | .089 | .554 | 98.466 | | | |
| 8 | .062 | .391 | 98.857 | | | |
| 9 | .045 | .279 | 99.136 | | | |
| 10 | .034 | .212 | 99.348 | | | |
| 11 | .031 | .191 | 99.539 | | | |
| 12 | .023 | .144 | 99.683 | | | |
| 13 | .015 | .096 | 99.779 | | | |
| 14 | .013 | .083 | 99.861 | | | |
| 15 | .012 | .073 | 99.934 | | | |
| 16 | .011 | .066 | 100.000 | | | |

Extraction Method: Principal Component Analysis.

From the table no.5 it is observed that only 1 component have Eigenvalue of at least more than 1 (14.113), the other components are having low quality scores and are not assumed to represent real traits underlying our 16 variables. Such components are considered "scree" as shown by the line graph below.
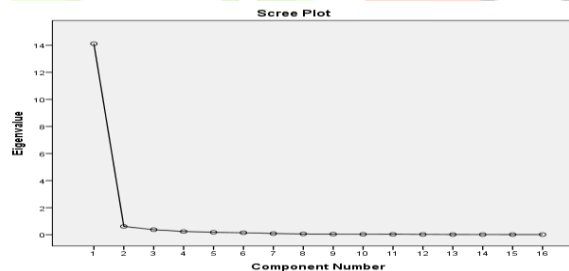


Graph No. 1

The graph no.1 depicts a scree plot visualizes the Eigenvalues that is quality scores. We can observe that only 1component (14.113), have Eigenvalue over 1. We consider this as strong factor, after that from component 2 onwards the Eigenvalues drop off dramatically. This sharp drop from 2 onwards strongly suggests that only 1 factor underlie our variables.

**Table No. 6 Component Matrix[a]**

|  | Component |
|---|---|
|  | 1 |
| Monthy Income | .969 |
| Customers opinion on gold as forcible investment for some special occasions | .969 |
| Customers get the market information on the gold investment | .968 |
| Customers opinion on gold investment as loss aversion | .967 |
| Customers feel comfort with the fluctuations in the price of a gold | .962 |
| Customers are saving the money in the form of gold investment | .962 |
| Customers decision of other investors on buying and selling of gold | .962 |
| Customers prefer highly on gold investment | .959 |
| Representation of investment on gold as worthable | .955 |
| Customers opinion on security towards gold investment | .948 |
| Customers are overconfident to have more returns on gold investment | .948 |
| Age | .942 |
| Customers are competent with the other investors on gold investment | .930 |
| For serious decision making gold investment can be available source of income | .929 |
| Marital Status | .844 |
| Gender | .792 |

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

One component extracted means there is only one dominant underlying mechanism present in the study sample. Therefore, it is not possible for rotated component matrix.

**Conclusion:**

It is concluded from our research that behavior matters a lot when it comes to making a wise investment decision on gold and therefore in selecting a particular investment option it requires an investors complete behavioral pattern which includes goals in life, spending habits, expenses, income, perception towards investments, lifestyle changes, time period, nature towards investment, thought process, natural habits, study of one's financials, risk bearing capacity, liquidity, expected return and linking of the investment with the goals, the understanding of the investment objective in line with one's goals.

Traditional finance theorists and behavioral finance economists are constantly at loggerheads with each other. While much has been said and written about behavioral finance as a field, there is no formal one writing that has been able to completely identify and conclude that stock market anomalies are a by-product of behavioral biases. Although behavioral finance does not claim that every investor would suffer from similar deceptive impressions, instead it sheds light on to take necessary initiatives to avoid such deceptive

impressions which influence the process of decision-making on gold investment, particularly while making investments. Thus, there is a significant impact of behavioral aspects of Customers towards investment on gold in the select region.

This research can shed light on the extent to which financial knowledge and literacy influence the relationship between behavioral finance factors, risk perception, and investment decision making. Understanding how individuals with different levels of financial education navigate behavioral biases can provide valuable insights for designing effective educational programs and interventions aimed at improving decision-making abilities and promoting overall financial well-being.

**References:**

1. Mishra. P.A( 2018),"The Nature and Efficiency of Gold Market", Journal of Portfolio Management, Vol. 14, No. 3.
2. Bhattacharya H(2017) "Deregulation of Gold in India", A Case Study in Deregulation of a Gold Market, World Gold Council Research Study no 27.
3. Mani, Ganesh and Srivyal Vuyyuri (2013), "Gold Pricing in India: An EconometricAnalysis", Economic Research, Vol. 16,No. 1.
4. MarketKrishna Gadasandula, Anitha Lourdu James, Nageswara Rao, Thadvuai, N. Balakrishnan, Mohamed Zaheeruddin (2024), Behavioral Finance In The Context Of India's Gold, Volume: 21, No: S3 (2024), pp. 1082-1097.
5. Agha Jahanzeb, Saqib Muneer, Saif-ur-Rehman (2012), Implication of Behavioral Finance in Investment Decision-making Process, Information Management and Business Review, Vol. 4, No. 10, pp. 532-536.
6. Kanan Budhiraja, Dr. T.V. Raman, Dr. Gurendra Nath Bhardwaj (2018), IMPACT OF BEHAVIORAL FINANCE ININVESTMENT DECISION, India International Journal of Civil Engineering and Technology (IJCIET), Volume 9, Issue 6.
7. Le Phuoc Luong, Doan Thi Thu HaUmea (2011), BEHAVIORAL FACTORS INFLUENCING INDIVIDUAL INVESTORS' DECISION-MAKING AND PERFORMANCE.
8. Dr. Vinay Kandpal, Mr. Rajat Mehrotra (2018), Role of Behavioral Finance in Investment Decision – A Study of Investment Behavior in India, International Journal of Management Studies Vol.–V, Issue –4(6).
9. Atinuke Bogunjoko (2021), Impact of Behavioral Finance on Investment decisions – An Investigation in to how psychological factors affect Investment decisions among millennial Investors in Nigeria, National College of Ireland.
10. Bashar Yaser Almansour, Sabri Elkrghli & Ammar Yaser Almansour (2023), Behavioral finance factors and investment decisions: A mediating role of risk perception, Taylor & Francis Group.