Investors Decisions towards the Gold Retailers in Mumbai Region

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1. Introduction

Gold plays number of roles – from protecting wealth and driving long-term returns to short-term or speculative needs. Gold is rare among metals [Ref.18] But it can be seen everywhere, from to technology. Unlike any other metals sometimes gold, the shiny precious yellow metal creates some emotional attachments among people. Gold also plays a huge position in the economy of a country. Gold is the third most consistently bought investment – 46% of global gold investors have chosen gold products, behind savings accounts (78%) and life insurance (54%). And in fashion, 56% of consumers have bought fine gold, compared to 34% who have bought platinum (WGC 2019).India has large number of gold consumers and Mumbai is trade hub of India which has immense market for Gold consumption. Traditionally, there is surge in demand during the festive and wedding seasons. It has a captive market in hands and hearts of common man. This has ensured that gold is preferred investment destination [Ref.14].

Import and Export of Gold

India is the second highest consumer of gold in the world as of 2017, supported by increasing disposable income of the middle class. The Indian middle class is expected to rise to 547 million by 2025 and this rise of young Indian middle-class worker is expected to lead to an increase in demand for gold. India exports of gems and are composed of a variety of items like cut and polished diamonds, gold and silver Jewelry, gold medallions and coins, colored gems tones, pearlsan dsynthetic stones, rough diamond sets. India is one of the largest gold exporters of the world and it exports to around 160 countries. In FY19, India's gold Jewelry exports stood at US$ 12,028.66 million and imports stood at US$ 291.19 million. India's gold Jewelry exports stood at US$ 4.06 billion and imports stood at US$ 98.17 billion in FY20P (April-July'19 Provisional).Mostly high – end Jewelry or machine –made Jewelry is imported usually from Middle East or South East Asia. In fiscal year (FY) 2019, India's gross exports of gold Jewelry rose by 24.36 percent to US$12.03billion.India's overall import is about 3 per cent, in terms of value US$ 32.8 billion in 2018-19 [Ref.13]

Gold Retailers of India

India's gold retail industry is highly fragmented. There are a few regional and national chains, but small, independent retailers take the lion's share of the market. Slowly, this is changing. Over the coming years, organized retailers will increase their market share. The country's manufacturing industry is fragmented, too; most are small goldsmiths employing just a few people. They are highly skilled though. Cities often specialize in crafting Jewelry out of specific materials, be that gold, silver, diamonds or pearls. But the sector faces challenges. Small gold manufacturers often struggle to access gold loans, the Jewelry industry struggles to access bank finance, and the industry suffers from poor infrastructure [Ref.14].

Gold retailer industry recognizes that there are two parts to the market: organized and unorganized. Organized retailers are typically characterized by having a chain of stores with a regional or national presence and a strong brand, courting largely urban gold investors through sophisticated advertising campaigns. Some, such as Amrapali Jewels, also have international brands. Retailers in the unorganized sector are usually smaller, standalone entities, such as small goldsmiths, family jewelers or designers focusing on high-end products. The majority – around 70% – of India's Jewelry industry can be categorized as unorganized [Ref.14].

Behavioral Finance

Behavioral finance is the study of the emotional and psychology factors and their effect on the behavior of investors or financial practitioners and ultimately, the subsequent effect on the markets [Ref.4]. It focuses on the fact that investors are not always rational and are influenced by their own biases. The groundbreaking work of psychologists Daniel Kahneman and Amos Tversky in the 1970s-1980s and the subsequent psychological research that have been conducted over the last few decades have revealed striking insights on the complex ways in which the human mind operates [Ref. 5]. These researchers have identified pervasive, subconscious biases that occur in human mind during decision-making process, and revealed an entirely new perspective on why we behave as we do. Behavioral researchers have taken the view that finance theory should take account of observed human behavior [Ref.6]. They use research from psychology to develop an understanding of financial decision making and create the discipline of behavioral finance [Ref. 9]

Need of the Study

Gold is a very important aspect of every individual's investment portfolio. Mumbai's gold market is flourishing. Individuals of Mumbai invest in gold in various formats such as gold coins, bullions, and so on, regardless of the variability in Mumbai's

gold prices over the past few years; demand for precious metal has steadily increased.

The study attempts to understand the Behavioral and Demographic Factors like: Gender, Age, Education, Occupation and Income influence the decisions of Investors while choosing the Gold retailers. The study comprises the respondent of Gold Investments only from Mumbai and Mumbai Sub-urban.

Aim of the Study

The study aims to ascertain the impact of Behavioral and Demographic factors on Investors decisions while selecting the particular gold retailers.

Scope of the Study

This study will focus on the targeted respondents, which are investing in gold. The study will cover the gold investor's demographic and behavioral aspects dealing through local traditional jewelers along with the Showrooms located in Mumbai region. Hence, this study may fill up literature gap and fill the study gap of gold investor making the decision on selection of gold retailer in gold in Mumbai city. This piece of study may serve as the unique source for further study on Gold retailers of India.

Objective of the study

1. To understand the effect of Demographic factors such as age, gender, income, profession etc. on the investor's choice in selecting a gold retailer in Mumbai region.
2. To examine the aspect of cognitive and emotional bias during the process of selection of gold retailer to invest in gold in Mumbai Region.

2. Literature Review

Suryawanshi & Jumle (2016) mentioned the bounded rationality which includes the four different steps of the decision-making process in behavioral finance. First, identify the objective then criteria then alternative of the investment and lastly select the best choice. It had a cognitive error, therefore, behavioral finance considered [Ref.1].

Sharda Kumari (2016) "Behavioral finance is a mixture of psychological and sociological finance concepts that add to the conventional finance models by incorporating cognitive elements into the decision-making system. Behavioral finance deals with how people collect the data and interpret it. In essence, cognitive finance analyzes how individuals make economic choices" [Ref.2].

Martin Sewell (2010) Behavioural finance is the study of attitude of financial practitioners and subsequent market impacts by examining factors of influence. Behavioural finance aids to clarify why and how markets might be inefficient and how cognitive and emotional decisions influence the behaviour of financial professionals [Ref.3].

Mittal & Vyas (2007) classified the Indian investors into different personality types and explored the relationship between various demographic factors and the business personality shown by the shareholders. This study's findings supported the argument that there are behavioural linkages to the choice of investments. The findings found to be in consistent with the notion that individuals tend to act "normal" rather than "rational" when making investment decisions. The results of this study revealed that the Indian investors can be classified into four dominant investment personalities casual, technical, informed and cautious [Ref.4].

Kahneman and Tversky (1974) indicated when investors are in the negative wealth (losses), then change direction from risk aversion to risk appetite [Ref.5]. The theory is considered as the dominant theory Kahneman and Tversky (1979) performed a sequence of research and criticized the anticipated usefulness concept suggested by Neumann and Morgenstern (1944) as a descriptive model of risk-taking decision-making. They suggested the notion of "Prospect Theory", which questioned the rational conduct of humans and completely altered the course of human studies in making investment choices [Ref.7].

Krishnan and Beena, (2009) aimed to examine whether cognitive biases "heuristics" and "frame dependency" would coalesce to form two major factors. The scale was linked to personality dimension. By using the behavioral finance concepts, the research validated that personality factors do affect individual investors" decisions and that the individual investors acts normal and usual and not always objective and rational. The cognitive biases the heuristics and frame dependency are not independent according to the research work. According to the research, the extraversion scores have a positive relationship, and openness scores have negative relationship with tendency to comply with behavioral finance concepts [Ref.8].

Mahapatra& Mehta (2015) found empirical results of the study suggest that both male and female investors are very clear and focused on their financial goals while investing and both genders get influenced by anchoring bias when they invest [Ref.9].

Mike Caggiano (2008), talked about Money Morning an online investment guide was suggested various ways of investing in gold. Some are gold coins, gold ETF, gold mining companies gold futures, bullion gold but the most popular is gold in an Indian market.

Agarwala, Dr. Barman & Sarma (2014) observed that Community wise investors of Guwahati are investing in gold per year at higher range whether the investor is male or female. Simultaneously they say "No" to Gold ETF's as investment options [Ref.11]

Dr. Nawaz & Sunidra (2013) Found that Most of the investors preferred to invest in and ornaments, they are interested in purchasing gold coins and bars. And only 2 per cent investors are aware of gold certificate and futures and options, gold mutual fund, e-gold and ETF's [Ref.12].

Hundal, Grover &Bhatia (2013) where findings revealed that profitability, tax aversion, future prospect, time value of money was motivates the retail investor to purchase gold as an investment. Despite hike in taxes and depreciating rupee, unless the consumers gets suitable alternatives which meet their respective needs, people don't want to shift away from gold, rather they are treating gold as safety buffer [Ref.10].

Literature Gap
Not enough literature is available with respect to the influence of demographic and behavioral factors affecting the decision towards choosing a particular Gold Retailer while investing in physical gold. The proposed study showcases the research gap which comprise the selection of gold retailer and behavioral factors influence the investors decisions of Mumbai and Mumbai suburban region.

Hypothesis
H1= The demographic factors such as age, gender, income, profession impact the selection of gold retailer in Mumbai Region
H0= The demographic factors such as age, gender, income, profession do not impact the selection of gold retailer in Mumbai Region
H2= The behavioral factors such as emotional and cognitive biases impact the selection of gold retailer in Mumbai Region.
H0= The behavioral factors such as emotional and cognitive biases does not impact the selection of gold retailer in Mumbai Region.

3. Research Methodology and Research Design
The research has been undertaken to study the Behavioral and Demographic factors impacting the process of selection of gold retailer in Mumbai region. The research is based on the exploratory research design.
Sample design
The study is incorporating both primary as well as secondary data. Sample design is based on convenience sampling Method. The sample of proposed study is based on non-probability sampling.

Data Collection
Primary Data: Using a well-structured questionnaire and personal interview, primary data is gathered from investors (the respondents). Around 270 questionnaires distributed among respondent and out of 250 responses filled altogether.
Secondary Data: The study collected secondary data from multiple sources including research journals, books, thesis reports, the internet for online publications and some published sources from national and global government organizations such as the World Gold Council, Ministry of Gems and Jewelry etc.

Theoretical framework of Research Study
The proposed study covered the Mumbai and Mumbai Suburban region to executed Demographic and Behavioral aspect of selection of Gold retailer.

The Behavioral Factors affecting the investors decisions while making the choice of gold retailer are measured by Factor analysis and demographic factors affecting the selection process of gold retailer are determine by computing the graphs and frequency analysis.
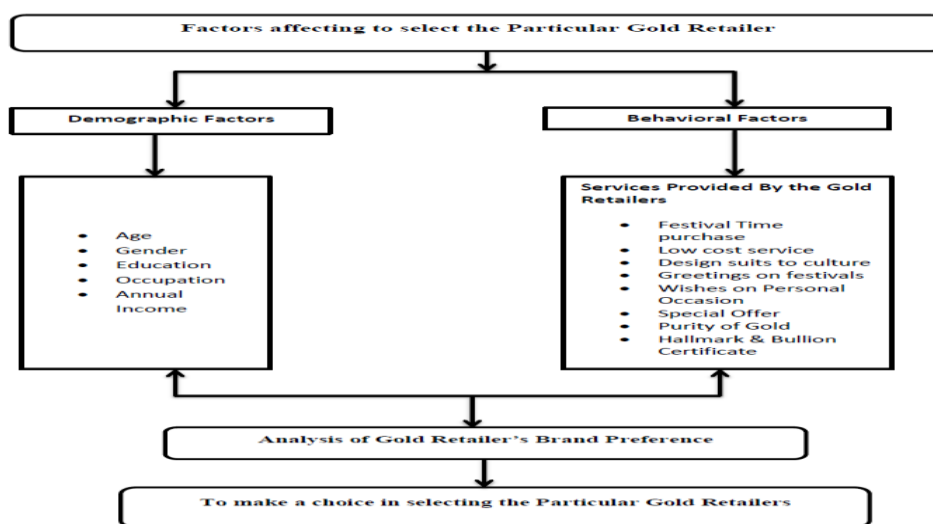

Diagram 1 *Theoretical Framework of Research Study*

Table 1 *Design of the Questionnaire*

Section	Variable has been considered	Questions included in per section	Measurement
Personal Information	Demographic Factors • Age • Gender • Occupation • Annual Income • Education	**Q. 2 to Q.7**	Nominal Scale
Multiple Choice Questions	**Behavioral Factors impacted by** • Purchase of Gold • Period of Purchase • Important to purchase during festival time • Purpose of purchase of Gold • Particular shop/Brand • Advertisement, Shop display • Special Offer • Switch to low cost	**Q.8 to Q.16**	Nominal Scale
Scaling Questions	**Behavioral Changes has been considered** • Get more Attention • Greets on your festival • Wishes you on your personal occasions • Special offer on personal occasions • Design suits your culture • Variety of product according to your taste and budget • Purity of Gold • Astrological Consultant • Hallmark certificate	**Q.17 to Q.27**	5 - Point Likert Scale

4. Data Analysis

The information gathered were processed and analyzed in accordance with the study's goals. The Raw data of 270 respondents have been examined to detect errors and omissions whenever is required and carefully scrutinized the complete questionnaires. The data of 250 respondents have been cleared and scrutinized with help of MS Excel. Coding has been executed for the efficient analysis through SPSS. The research study determined a large volume of raw testimony which has been reduced into homogeneous groups to acquire the meaningful relationship. The study includes the overall 22 variables which have been divided into behavioral factor analysis and demographic factor analysis.

Analysis of Behavioral Factors

The proposed study has taken the 13 variables to compute the factor analysis with the help of SPSS output. It comprises the reliability test, adequacy test, factor loading and principle component method.

The Factor Analysis was used to identify the key variables that affect the investor's choice of selecting the Gold Retailer in the Mumbai region. This method has been regarded suitable as it does not require pre-existing functional relationships and is well-known for data reduction. It is used to decrease a big amount of variables into a few key factors.

The Reliability Test of Sample

The reliability test has been taken into consideration to prove the authentication of research data. Reliability test has been extracted with help of Cronbach alpha. SPSS output given below

Table 2 *Case Processing Summary*

		N	%
Cases	Valid	250	100.0
	Excluded[a]	0	.0
	Total	250	100.0
a. List wise deletion based on all variables in the procedure.			

Table 3 *Reliability Statistics*

Cronbach's Alpha	N of Items
.768	12

Cronbach alpha is 0.768 so it shows that the reliability of this data is 100% as standard value of Cronbach alpha should be 0.7, however, if any researcher willing to do any project in future he/she can relies on this data if they want to conduct research based on Gold investment decision towards Gold retailers in Mumbai Region.

Adequacy Test

The Kaiser-Meyer-Olkin is the sampling adequacy metric that differs between 0 and 1. The values nearer to 1 are better and the recommended minimum is the value of 0.7. The Sphericity Test of the Bartlett is the test for the null hypothesis that the matrix of correlation has an identity matrix. In view of this, these experiments provide the minimum standard for Factor Analysis to continue.

Table 4 *KMO and Bartlett's Test*

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.803
Bartlett's Test of Sphericity	Approx. Chi-Square	601.687
	Df	36
	Sig.	.000

Normally, 0 < KMO < 1, If KMO > 0.7, the sample is adequate

KMO = 0.803, this shows that the sample is sufficient and the Factor Analysis can be carried out. It shows that the factors identified through responses collected through survey were suitable and valid to study the problem.

Bartlett's Test of Sphericity

Taking a meaning level of 95 percent= 0.05 the p-value (Sig.) of.000 < 0.05, therefore the factor analysis is valid. We therefore dismiss the null hypothesis H0 and accept the alternative hypothesis (H1 & H2) that behavioral variables such as mental and cognitive biases and population variables such as age, gender, earnings, schooling, employment affect investors investment choices of gold retailers in the Mumbai region.

The Kaiser-Meyer Olkin (KMO) and Bartlett's sampling adequacy test measure were used to examine the appropriateness of factor analysis. Chi-square's approximate is 601.687 with 36 degrees of liberty, which is of importance at 0.05 Level. There is also a big KMO statistic of 0.803 (higher than 0.50). Factor analysis is therefore regarded a suitable technique for further data analysis.

Identification of Variables

The classification of data depleted to arranging data in groups or Categories on the basis of common characteristics by using factor loading values.

Table 5 *Identification of Variables*

Factors Derived by Authors	Variables Included	Factor loading
Emotional Bias	• Greets on your festival	**.790**
	• Wish you on your personal occasion	**.743**
	• Satisfy with purity of gold	**.678**
	• Provide the hallmark and bullion certificate	**.667**
	• Lower cost offer by retailers	**.646**
Cultural Bias	• Purchase of gold is important during festival time	**.679**
	• Design suits to the culture and tradition	**.521**
	• Provides the special offer on your festival / occasion	**.815**

The factor loading shows the correlation coefficient between variables and factors, based on above factor loadings, the variables within each extracted factor were identified for further Analysis. This data was framed into SPSS to generate a predictive evaluation for the Behavioral factors affecting Investment decisions towards Gold Retailers in Mumbai region.

Table 6 *Total Variance Explained*

Component	Initial Eigen values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.392	37.692	37.692	3.392	37.692	37.692	3.390	37.664	37.664
2	1.468	16.312	54.004	1.468	16.312	54.004	1.471	16.340	54.004
3	.888	9.870	63.874						
4	.801	8.903	72.777						
5	.665	7.390	80.167						
6	.563	6.253	86.420						

7	.484	5.380	91.800					
8	.418	4.644	96.444					
9	.320	3.556	100.000					
Extraction Method: Principal Component Analysis.								

On the basis of Varimax Rotation with Kaiser Normalisation, two factors were acquired. Each factor defines all variables that have factor loads higher than 0.5. There were nine variables combined into two factors. Two factors have been acquired from the 9 variables used in the studies. These 2 collected factors outlined 54.004 percent of the variation of Behavioral Biases impact the selection of Gold retailer in Mumbai region.

Table 7 *Rotated Component Matrix*[a]

	Component	
	1	2
Purchase of gold Imp during festival time		.679
Lower Cost offered by Retailers	.646	
Get More Attention		
Greets on your Festivals	.790	
Wish U on Personal Occasion	.743	
Special Offer on Ur fest/occasion		.815
Designs suits Ur culture/tradition		.521
Satisfy with Purity of Gold	.678	
Bullion Certificate	.667	
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		
Rotation converged in 3 iterations.		

In Rotation Components Matrix different items were explained or predicted by different underlying factors, and each factor explains more than one item. Usually, each of the variables is extremely charged in one factor and less charged to the other. The variable with the highest value in each line is chosen as portion of the corresponding factor to define the factors included in each factor. However, each variable has a certain loading value from the different components, but the values less than have been removed from the list. The values were highlighted in each of the rows to group the 9 variables into 2 core factors. Both factors give the Eigen values more than 0.5. The factor 1 accounts for 37.664% and factor 2 indicates 57.001% of the variance which shows behavioral factors affecting the choice of gold retailer in Mumbai region.

The Factors derived by the Authors
Emotional Bias
An emotional bias is a distortion in cognition and decision making due to emotional factors. To believe something that has a positive emotional effect, that gives a pleasant feeling, even if there is evidence to the contrary. When a Gold Retailer wishes investor on the festivals and other personal occasions that the investor might be celebrating, this creates emotional bias in the mind of the investor. This emotional bias impacts the decision of the gold investor while selecting the gold retailer at the time of his next purchase

Cultural Bias
Cultural bias is the tendency to judge people in terms of one's own cultural assumptions. When we find that a particular person is understanding and respect full towards our culture and tradition we tend to have a positive outlook towards him. Similarly when a Gold Retailer is sensitive towards the culture and tradition by providing the special offer during the festival and provides the designs suits to culture and tradition of the gold investors.

The Analysis of Demographic Factors
Demographic factors measured with frequency analysis. The proposed study has been taken the 9 Variables to compute the frequency analysis in various form with the help of SPSS output. The demographic factors like age, gender income are affecting the selection choice of gold retailer through the graphs and table, bar chart, pie chart, frequency table, crosstabs, summary table etc.
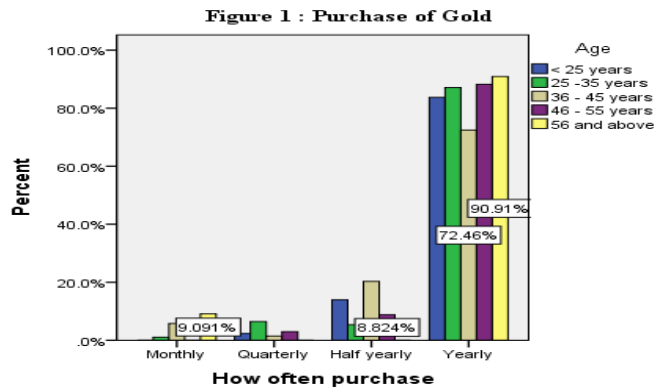
Figure 1 : Purchase of Gold

Figure 1 indicates the period wise age group of respondents, who are purchasing the gold in physical form. The targeted respondents preferred to purchase a physical gold on yearly basis. The figure shows around 70 – 90 percent of the respondents from all age groups are invest in physical gold.
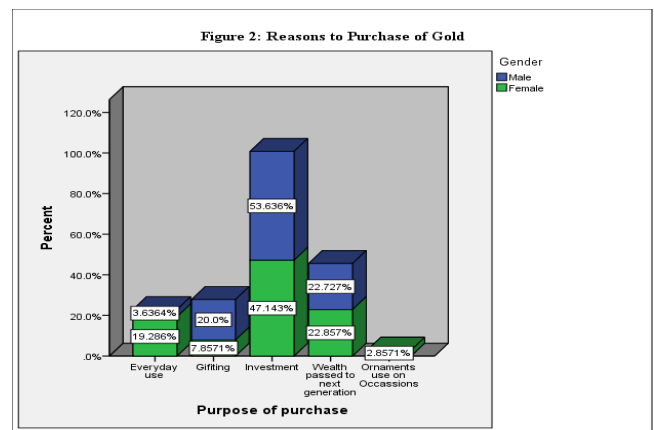

Figure 2: Reasons to Purchase of Gold

Figure 2 represent the purpose of purchasing the physical gold. There are multiple options given to the respondents such as purchasing the physical gold for everyday use, as gifting, as investment, as wealth passed to next generation and ornaments use on occasions. Around 53.64% of Male respondents and 47.14% of female respondents are purchasing the physical gold for the purpose of Investment. The female respondents about 22.86% are investing in gold because they believes that it is a wealth which can passed to the next generation and nearby 20% of the them using the physical gold for daily wear purpose.

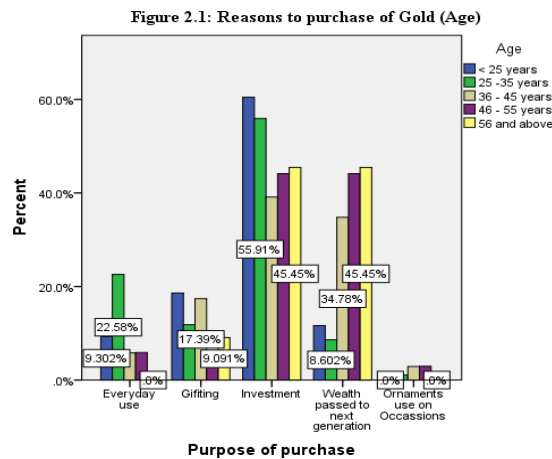**Figure 2.1: Reasons to purchase of Gold (Age)**

Figure 2.1 showcase age group of respondents and their reasons to buy the physical gold. Young adults i.e. age group of 20 to 35 years is buy the physical gold for investment purpose. The middle age group (36 to 55 years) and the old age group (56 years and above) of respondents are investing in tangible gold as they consider it is a wealth for them and they can pass to their next generation.
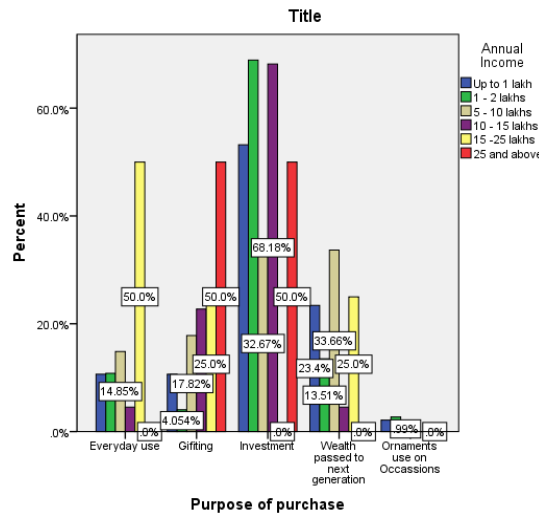
Figure 2.2 Reasons to Purchase Gold (Annual Income)

Figure 2.2 indicates the various reasons of the respondents based on the different annual income levels. Nearby 69% of the respondents from the annual level of 1 to 2 lakhs and 5 to 10 Lakhs purchase the gold for investment purpose but around 50% of upper middle income level group i.e. annual income of 15 to 25 and above lakhs are investing in tangible gold for daily use and gifting purpose.
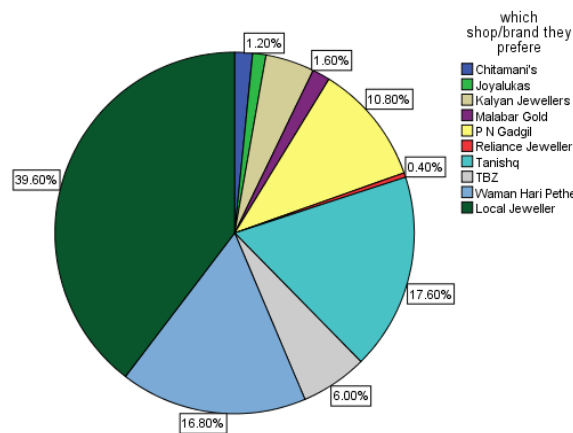
Analysis of Gold Retailer's Brand Preferences
The proposed study includes the around 10 gold retailers of Mumbai region to conduct the survey and to understand the respondents preferences to select the particular gold retailer on the basis of different services they provides to the gold investors.
List of the Gold retailers –
1. Chitamani's
2. Joyalukas
3. Kalyan Jeweler
4. Malabar Gold
5. P N Gadgil
6. Reliance Jeweller
7. Tanishq
8. Tribhovandas Bhimji Zaveri (TBZ)
9. Waman Hari Pethe
10. Local Jwellers

Figure 3 : Gold Retailers

The above figure represents the % of gold retailers in different brands including local gold jeweler of Mumbai region.
The following figures are extracted the relationship between the Demographic factors and the brand preferences of the gold investors of Mumbai region.

Figure 3.1: Brand Preference (Gender)

The figure 3.1 expresses the percentage of male and female, who gives the preference to the particular gold retailer brand. The male and female respondents are having the more faith on local jeweler than other branded gold retailer.

Figure 3.2 : Brand Preference (Age)

In the figure 3.2, the old age group of respondents is preferred local jeweler. On the other hand the young generation and middle age group of respondents prefers Waman Hari Pethe, Tanishq and P N Gadgil brands of gold retailers in addition to local jeweler.

Figure 3.3 : Brand Prefernce (Annual Income)

Figure 3.3 extracted the gold retailer brand preferences on the basis of annual income level of the respondents. The 75% of the respondents, who has the income level of 15 lakhs and above select the Tanishq gold retailer followed by the P N Gadgil, which indicate the 50% of the respondents. The low income level of the respondents choice the local jeweler over organized gold retailers.
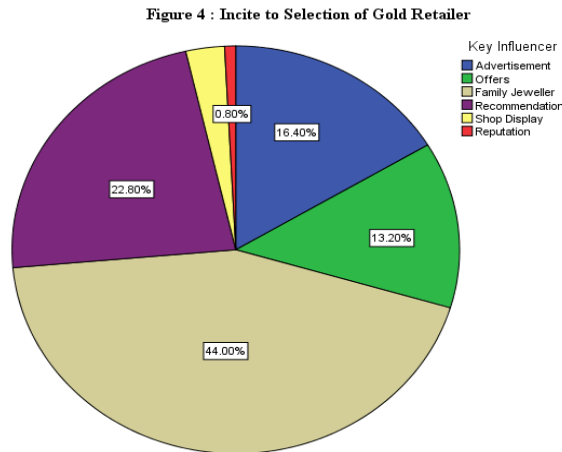

Figure 4 *Represents the Various Offers Attracts the Gold Investors by the Gold Retailers*

The 44% of the respondents select the Gold retailer because they consider them as their family jeweler. Most of the gold investor makes their choice of gold retailer on the basis of the Advertisement, special offer provided by them and the recommendation from family and friends.

The following table and figure 5 includes the two different graphs and crosstab of offer provided by the gold retailer. The high % of female and male respondents selects the gold retailer according to customization and discount services provided by the gold retailer. The young and middle age group of investors make the choice of gold retailer on the most like service such as customization, Zero Making Charges and Monthly Investment plan

Case Processing Summary of Figure 5						
	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
Offer Like the Most * Age	250	100.0%	0	0.0%	250	100.0%
Offer Like the Most * Gender	250	100.0%	0	0.0%	250	100.0%
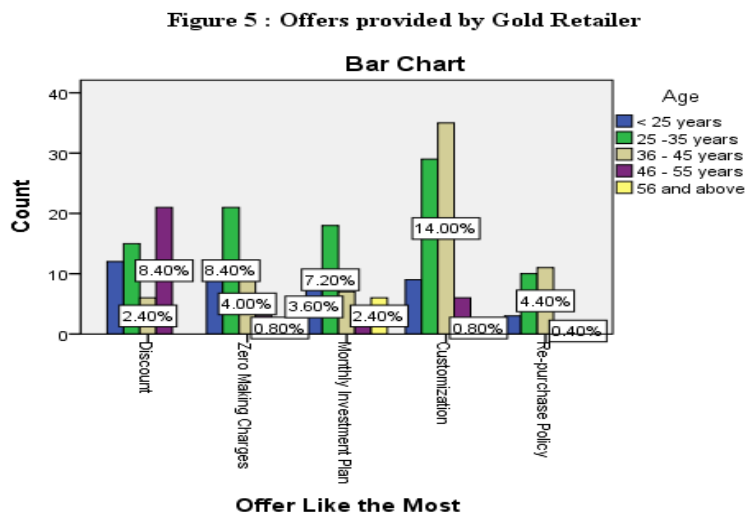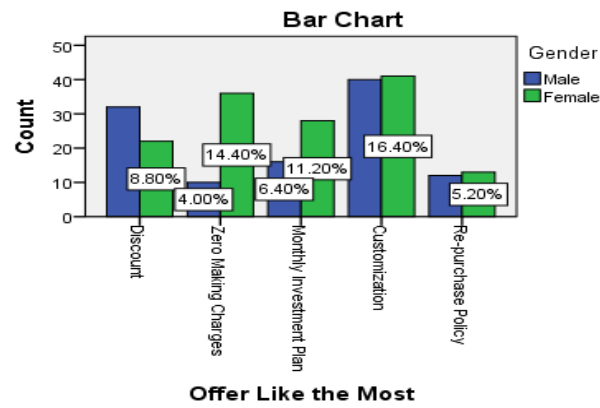
5. Conclusion

The research has given a much better understanding of Gold investor's behavior regarding investment decisions to select the Gold Retailer. It is an overview of the different steps of service preferences, which investors go through before making the actual purchase. All the Behavioral and Demographic factors mentioned above do play a major part in decision making process of a gold retailer.

From the research we can conclude that the gold investor prefer a retailer who satisfies the factors such as designs options to match their Culture and tradition, greetings and wishes on personal occasion, Low cost service, purity of gold, hallmark and bullion certificate etc. The study derives that Cultural bias and Emotional bias affects the investors while selecting the gold retailer.

The result of the study determined by the factor analysis, frequency analysis and computation of Graphs, Here mostly people tend to choose a local retailer rather than a branded retailer as they feel more comfortable regarding the offers, and importantly trust that has been built up over the years of transactional relation. A family jeweler is preferred more often than other option.

Also it has been observed in the research that for the time being buyers are not very comfortable in purchasing gold online. They prefer to visit the jeweler and choose the by actually being present there.

The research concludes that the gold investors of Mumbai region do get influenced by the demographic and behavioral factors while selecting the Gold Retailer for purchasing physical gold.

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