



A Study on Factors Influencing Consumer Purchase Behaviour of Gems and Jewellery

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Abstract - Ornaments have been a part of civilizations in India since ages. Jewellery has been an integral part of the Indian culture as they were in demand and in fashion since ancient civilization of Harappa and Mohanjodaro. As a well known fact, jewellery can be adorned to highlight almost any part of the body. India is known to be the largest consumer of gold in the world. Gems and jewellery have been important part for both aesthetic as well as investment purposes. The important factors that influence purchase behaviour of jems and jewellery are motives, satisfaction, environment, aesthetic needs, quality, mind set and belief.

Keywords – Gems and Jewellery, Consumers, Purchase behavior

1. INTRODUCTION

The gems and jewellery industry is a sparkling, traditional and glamorous industry. The industry employs millions of people globally. It is a global industry from raw materials processing and is on the path of transformation. With the evolution of human society, the several activities aligned with the industry like mining, polishing, cutting, retailing and fabrication.

India plays a very significant role in world's gems and jewellery market. The size of the Indian jewellery market is the biggest in the world, second only to the US market, followed by China, Japan and Italy. India is known to be the largest consumer of gold in the world. Indian designers have made a mark on the world jewellery scene and got recognition for design development as well. The growth in gems and jewellery exports is a record among the major Indian export sectors. India has, in present, largest artisans for making jewellery in the world. In fact, every village boasts of a family of goldsmiths, having a very long tradition of jewellery making. But there are problems ahead, the skilled man power and technology to create and produce designs for the international markets is the main challenge among others.

2. STATEMENT OF THE PROBLEM

There are many factors affecting consumer behaviour. Due to impact of various factors, consumers react or respond to marketing programme differently. For the same product, price, promotion and distribution, their responses differ significantly. The factors do not affect equally to all the buyers; they have varying effect on their behaviour. However, some factors are more effective, while some have negligible effect on consumer behaviour. A consumer's buying behaviour is influenced by cultural, social, personal factors and psychological factors. These all factors jointly shape consumer purchase behaviour of gems and jewellery and influence the decision of consumers in their day-to-day life. The decision relating to purchase and consumption of gems and jewellery are influenced by these factors in different way magnitude and direction. This study addresses various factors influencing towards purchase of gems and jewellery by consumers in Virudhunagar District.

3. OBJECTVIES OF THE STUDY

- ❖ To examine the purchase behaviour of consumers of gems and jewellery
- ❖ To find out the factors influencing the actual purchase of gems and jewellery by consumers
- ❖ To offer suitable suggestions for effective purchase of gems and jewellery by consumers

4. METHODOLOGY

In this study, descriptive research approach has been adopted. The data have been collected through survey method. The research problem, objective and questionnaire have been formulated accordingly. It has been carried out on the basis of secondary as well as primary

data. The questionnaire is based on Likert scaling from the scale of 1 to 5 weightage.

5. DATA COLLECTION

Data, which is a vital aspect in any research, has been collected through various resources for the study. Both primary data and secondary data have been collected and used for the research.

The secondary data have been gathered from various sources like standard text books of related topics, journals, newspapers, websites and so on.

Primary data have been collected through statistical sampling survey directly from the consumers of gems and jewellery in Virudhunagar District. The structured and undisguised form of questionnaire used to collect the necessary primary data that specifically relate to the objectives.

The questionnaire for the present study was pre-tested with 20 respondents in Virudhunagar District. Based on the results of the pre-test, the questionnaire was revised and finalised. The researcher himself visited and personally met all the respondents for obtaining the necessary data. Completed questionnaire was checked and edited immediately on the spot as to its completeness and correctness in order to avoid revisits.

6. SAMPLING DESIGN

The population for the study consists of all those living in Virudhunagar District. As per census 2011, there are 19,43,309 peoples in Virudhunagar District. To be representative, samples are drawn from each of the eight taluks in Virudhunagar District. Based on the time and resource available, a sample size of 450 consumers is considered adequate. The individual sample consumers were selected according to the convenience of the researcher from different taluks. Thus, stratified convenient sampling technique was used in the present study. The samples are taken from each of the eight taluks.

7. TOOLS OF ANALYSIS

The data collected have been analysed and interpreted by applying weighted average, factor analysis and reliability tests. These tools

were applied to ascertain the important factors and to test the reliability of the data. The SPSS package is used comprehensively for this purpose.

8. FACTORS INFLUENCING PURCHASE OF GEMS AND JEWELLERY

There are various factors which influence the purchase of gems and jewellery by the consumers in Virudhunagar District. Based on the data collected during the preliminary study, the researcher identified the following 22 factors influencing the purchase decision.

TABLE 1 FACTORS

Sl. No	Factors
1.	Advertisement
2.	Family liking
3.	Availability of Various Designs
4.	Reliability on seller
5.	Offers
6.	Discounts
7	Best quality
8	Price Fluctuations
9	Astrology
10	Investment
11	Atchaya Thrithiyay
12	New models
13	Festivals
14	Status
15	Marriage
16	Guarantee
17	Beautification
18	Appearance
19	Gift
20	Technology
21	Trade fairs
22	Alternative Usage (Credit Facility)

During the survey the study participants are asked to express their degree of agreement to the above factors. For the purpose of analysis, the degree of agreement is classified under five heads, namely, (i) Strongly Agree, (ii) Agree, (iii) Neither Agree Nor Disagree, (iv) Disagree and (v) Strongly Disagree.

To measure the level of acceptance among the respondents, to the factors, weights were assigned as 2, 1, 0, -1 and -2 for the five levels of agreement ‘Strongly Agree’, ‘Agree’, ‘Neither agree nor disagree’, ‘Disagree’ and ‘Strongly disagree’ respectively.

The table given below shows the findings of the study on the agreement of the respondents towards the various factors influencing towards purchase of gems and jewellery in Virudhunagar district.

TABLE 2 FACTORS INFLUENCING PURCHASE OF GEMS AND JEWELLERY

Sl. No	Factors	SA (2)		A (1)		NN (0)		DA (-1)		SD (-2)		Total		WMS
		No	Po	No	Po	No	Po	No	Po	No	Po	No	Po	
1.	Advertisement	247	494	141	141	44	0	8	-8	10	-20	450	607	1.35
2.	Family liking	230	460	162	162	44	0	11	-11	3	-6	450	605	1.34
3.	Availability of Various Designs	193	386	123	123	106	0	22	-22	6	-12	450	475	1.06
4.	Reliability on seller	163	326	149	149	103	0	27	-27	8	-16	450	432	0.96
5.	Offers	181	362	113	113	110	0	30	-30	16	-32	450	413	0.92
6.	Discounts	176	352	135	135	89	0	33	-33	17	-34	450	420	0.93
7	Best quality	228	456	114	114	82	0	18	-18	8	-16	450	536	1.19
8	Price Fluctuations	156	312	150	150	94	0	38	-38	12	-24	450	400	0.89
9	Astrology	158	316	101	101	122	0	39	-39	30	-60	450	318	0.71
10	Investment	193	386	130	130	90	0	23	-23	14	-28	450	465	1.03
11	Atchaya Thrithiyay	195	390	112	112	97	0	32	-32	14	-28	450	442	0.98
12	New models	171	342	154	154	90	0	22	-22	13	-26	450	448	1
13	Festivals	186	372	128	128	91	0	28	-28	17	-34	450	438	0.97
14	Status	155	310	131	131	114	0	35	-35	15	-30	450	376	0.84
15	Marriage	186	372	129	129	102	0	23	-23	10	-20	450	458	1.02
16	Guarantee	194	388	135	135	88	0	28	-28	5	-10	450	485	1.08
17	Beautification	175	350	142	142	93	0	27	-27	13	-26	450	439	0.98
18	Appearance	172	344	135	135	110	0	21	-21	12	-24	450	434	0.96
19	Gift	149	298	130	130	126	0	25	-25	20	-40	450	363	0.81
20	Technology	138	276	116	116	132	0	45	-45	19	-38	450	309	0.69
21	Trade fairs	140	280	111	111	146	0	25	-25	28	-56	450	310	0.69
22	Alternative Usage (Credit Facility)	136	272	113	113	143	0	29	-29	29	-58	450	298	0.66

Source: Primary Data.

The above table highlights that the various factors influencing purchase of gems and jewellery by consumers in Virudhunagar district, namely, 'Advertisement' 607 points, 'Family liking' 605 points and "Best quality" 536 points.

In order to reduce the total number of factors by integrating the effects of all the factors into a lesser number of factors, factor analysis has been made.

9. KMO and BARTLETT'S TEST

Kaiser-Meyer-Olkin measure of sampling adequacy compares magnitudes of observed correlation coefficients to partial correlation coefficients. Small value of the Kaiser-Meyer-Olkin statistic indicates that the correlation between pairs of variables

cannot be explained by other variables and that factor analysis may not be appropriate. Generally, a KMO value greater than 0.5 is desirable.

Bartlett's test is used to determine if values in the correlation matrix are different from an identity matrix. Before extracting the factors to test the appropriateness of the factor model, Bartlett's test of sphericity was used to test if the null hypothesis of the variables is index correlated in population. The test statistic for sphericity is based on a Chi-square transformation of the determinant of the correlation matrix.

The computed results of Kaiser-Meyer-Olkin Measure of Sampling Adequacy and

Bartlett's Test of Sphericity are given in Table 3.

TABLE 3 KMO and BARTLETT'S TEST

Measure		Estimated Value
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		0.841
Bartlett's Test of Sphericity	Approximate Chi-Square	1765.169
	Degrees of freedom	231
	Significant	.000

It has been observed from Table 3 that Sampling adequacy measured using the Kaiser-Meyer-Olkin of 0.841 was taken as acceptable and the Bartlett's test was significant with P = 0.000, being less than 0.05. Thus the factor analysis may be considered an appropriate technique for analyzing the data.

10. FACTOR ANALYSIS

Factor analysis is used to identify important underlying factors that explain the pattern of purchase decision. Factor analysis is often used in data reduction to identify a small number of factors that explain most of the variance observed in a much larger number of manifest variables.

Factor analysis was used, using the principal component analysis method in SPSS. This is an index used to evaluate the appropriateness of factor analysis in the study. The usual method for rotation is Varimax rotation. The idea here is that the interpretability of a factor can be measured by the variance of the square of its factor loadings.

It is necessary that the scale constructed and the components extracted should be able to explain the variance in the data. To analyse this variance, we have to calculate eigen values, which will explain the variance among the factors. A low eigen value contributes very little to the explanation of variances in the set of variables being analysed. The sum of eigen values, as expected, is equal to the number of variables being analysed. There are 22 variables that can be extracted. But only those factors can be extracted which have more than one. By retaining only the variables with eigen values greater than one, we can infer that 22.285 per

cent of variance is explained by factor 1, 6.752 per cent of variance is explained by factor 2, 5.876 per cent of variance is explained by factor 3, 5.341 per cent of variance is explained by factor 4, 4.966 per cent of variance is explained by factor 5, 4.809 per cent of variance is explained in factor 6 and 4.573 per cent of variance is explained by factor 7.

Extraction sum of squared loadings is also used for factors influencing towards purchase of gems and jewellery. Table 4 indicates that of the total 54.601 per cent variance, all are not uniformly distributed across all the factors, since it is evident that the first component itself accounts for 22.285 per cent variance.

The principal component analysis is a multivariate technique for identifying the linear components of a set of variances. The seven factors extracted together account for 54.601 per cent (under rotation sum of squared loadings) of the total variance. This is pretty good because it is able to economise on the number of variables (from 22, it has been reduced to 7 underlying factors), while only about 45.399 per cent has been lost (54.601 per cent is retained by the seven factors extracted out of the 22 variables). This percentage can be disregarded. The initial eigen values, extraction sums of squared loadings and rotation sums of squared loadings are given in Table 4.

Table 4 shows the component loadings that are correlations between the variables and the components. This is the central output of the factor or principal component analysis, which can be taken as the basis for inputting a label to different factors of components. It is a general practice that while interpreting a component importance is given to the larger size of the component loading for a variable. Also, the first component is generally more highly correlated with the variables than the second and so on. It can be seen from the table that variance is now evenly distributed in a range of 10.150 to 54.601 per cent, which is 22.285 to 54.601 per cent.

TABLE 4 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	4.903	22.285	22.285	4.903	22.285	22.285	2.233	10.150	10.150
2	1.485	6.752	29.036	1.485	6.752	29.036	1.955	8.887	19.037
3	1.293	5.876	34.912	1.293	5.876	34.912	1.830	8.320	27.357
4	1.175	5.341	40.254	1.175	5.341	40.254	1.592	7.234	34.591
5	1.092	4.966	45.219	1.092	4.966	45.219	1.589	7.225	41.816
6	1.058	4.809	50.028	1.058	4.809	50.028	1.477	6.713	48.528
7	1.006	4.573	54.601	1.006	4.573	54.601	1.336	6.073	54.601
8	.921	4.188	58.789						
9	.868	3.947	62.736						
10	.860	3.909	66.645						
11	.803	3.650	70.295						
12	.756	3.436	73.731						
13	.739	3.360	77.091						
14	.705	3.204	80.295						
15	.665	3.024	83.319						
16	.641	2.912	86.231						
17	.591	2.687	88.918						
18	.580	2.636	91.554						
19	.542	2.464	94.018						
20	.509	2.312	96.330						
21	.439	1.994	98.324						
22	.369	1.676	100.000						

Extraction Method: Principal Component Analysis

In the following scree plot, it is clear that seven components have eigen value more than one.

Scree Plot

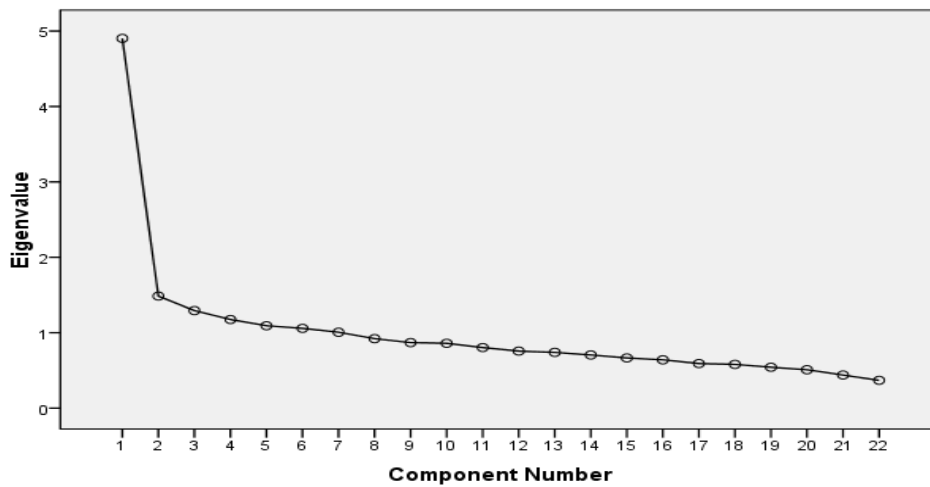


FIGURE 1

TABLE 5 ROTATED COMPONENT MATRIX

	Component							h2
	F1	F2	F3	F4	F5	F6	F7	
Marriage	.727	.225	.023	-.002	.093	.058	.146	0.613
Discounts	.699	.017	.077	.039	.219	.210	.020	.589
Festivals	.640	.006	.223	.253	-.140	.075	.047	.551
Beautification	.536	.151	.170	.184	.206	-.044	.019	.418
Investment	.035	.653	.190	-.048	.011	.206	.191	.545
Availability of Various Designs	.130	.596	.009	.239	.172	.008	-.036	.460
Reliability on seller	.416	.541	.026	.038	.058	.112	-.055	.487
Trade fairs	.004	.468	.094	.193	.334	.133	.280	.473
New models	.209	.294	.132	.290	.086	.237	.077	.301
Price fluctuations	.166	.111	.802	.031	.029	.077	.060	.695
Technology	.051	.033	.736	.094	.103	-.034	.161	.592
Alternative Usage (Credit Facility)	.177	.117	.573	.106	.103	.146	-.309	.512
Status	.020	.021	.026	.653	.287	.221	.025	.560
Appearance	.132	.308	-.015	.645	-.031	.065	-.107	.545
Gift	.213	-.006	.290	.580	.046	-.094	.182	.510
Best quality	.118	.332	.007	.098	.712	-.190	.009	.676
Guarantee	.138	-.022	.139	.170	.642	.295	.123	.583
Offer	.264	.084	.233	-.024	.506	.311	-.299	.573
Atchaya Thrithiyay	.155	.088	.056	.031	.176	.734	.139	.625
Family liking	.063	.373	.033	.198	-.061	.589	-.060	.537
Astrology	.147	-.074	.051	.156	.023	.290	.689	.613
Advertisement	.082	.331	.048	-.083	.028	-.113	.644	.554
Percentage to Total Variance Explained	10.150	8.887	8.320	7.234	7.225	6.713	6.073	

Extraction Method: Principal Component Analysis.
 Rotation Method: Varimax with Kaiser Normalization.
 a. Rotation converged in 11 iterations.

Table 5 exhibits the rotated factor loading for the 22 statements (factor) of the purchase of gems and jewellery. It is clear from the table that all the 22 statements had been extracted into seven factors, namely, F1, F2, F3, F4, F5, F6 and F7. The new factors with identified new names which influence purchase behaviour of consumers of gems and jewellery are discussed as follows.

10.1 Motives

The first factor characterizing the purchase behaviour of gems and jewellery is named as ‘Motives’. The different motives of buying gems and jewellery like buying for ‘Marriage’, buying at them of ‘Discount’ offer, buying during ‘Festival’ seasons and buying for ‘Beautification’ of oneself influence the consumer behaviour. The factor loading of ‘Marriage’ was .727, followed by ‘Discount’ was .699, ‘Festivals’ was .640 and

‘Beautification’ was .536 as shown in the following Table 6.

**TABLE 6
 FACTOR 1 – MOTIVES**

Sl. No	Variables	Factor Loading	Eigen Value	Percentage of Variance
1	Marriage	.727	4.903	22.285
2	Discounts	.699		
3	Festivals	.640		
4	Beautification	.536		

Among the factors influencing purchase behaviour of gems and jewellery, the factors regarding ‘Marriage’, ‘Discount’, ‘Festivals’ and ‘Beautification’ were the factors with higher positive loadings on factor 1 are characterized “Motives”. Hence, F1 is termed as Motives. The eigen value for the above factor 1 was 4.903 and the percentage of variance was 22.285. It is concluded that the influence of purchase behaviour of gems and jewellery based on the variables has resulted in

‘Marriage’ in the study area and it was agreed by the respondent followed by the ‘Discounts’, ‘Festivals’ and ‘Beautification’.

10.2 SATISFACTION

The second factor characterizing the purchase behaviour of gems and jewellery is named as ‘Satisfaction’. The customers obtained satisfaction from purchase of gems and jewellery when it is a worthy ‘Investment’, there is ‘Availability of Various designs’, the ‘reliability of seller’, purchase is from a ‘Trade Fair’ and there are ‘New Models’. The factor loading of ‘Investment’ was .653, followed by ‘Availability of Various designs’ was .596, ‘Reliability on seller’ was .541, ‘Trade fairs’ was .468 and ‘New models’ was .294 as shown in the following Table 7.

TABLE 7 FACTOR 2 – SATISFACTION

Sl. No	Variables	Factor Loading	Eigen Value	Percentage of Variance
1	Investment	.653		
2	Availability of Various Designs	.596	1.485	6.752
3	Reliability on seller	.541		
4	Trade fairs	.468		
5	New models	.294		

From the table 7 factors regarding, ‘Investment’, ‘Availability of various designs’, ‘Reliability on seller’, ‘Trade fairs’ and ‘New models’ were the factors with higher positive loadings on factor 2 are characterized “Satisfaction”. Hence, F2 is termed as Satisfaction. The eigen value for the above factor 2 was 1.485 and the percentage of variance was 6.752. It is concluded that the influence of purchase of gems and jewellery based on the level of satisfaction of customer has resulted in ‘Investment’ in the study area and it was agreed by the respondent followed by the ‘Availability of various designs’, ‘Reliability on seller’, ‘Trade fairs’ and ‘New models’.

10.3 ENVIRONMENT

The next factor characterizing the purchase behaviour of gems and jewellery is named as ‘Environment’. The variables operating in the environment like ‘Price

fluctuations’, ‘Technology’ and ‘Alternative Usage (Credit facility)’ of gems and jewellery influence the consumer behaviour. The factor loading of ‘Price fluctuations’ was .802, followed by ‘Technology’ was .736 and ‘Alternative usage (credit facility)’ was .573 as shown in the following Table 8.

TABLE 8 FACTOR 3 – ENVIRONMENT

Sl. No	Variables	Factor Loading	Eigen Value	Percentage of Variance
1	Price fluctuations	.802		
2	Technology	.736	1.293	5.876
3	Alternative Usage (Credit Facility)	.573		

From the above table factors regarding, ‘Price Fluctuations’, ‘Technology’ and ‘Alternative usage (credit facility)’, were the factors with higher positive loadings on factor 3 are characterized “Environment”. Hence, F3 is termed as Environment. The eigen value for the above factor 3 was 1.293 and the percentage of variance was 5.876. It is concluded that the influence of purchase of gems and jewellery based on Environment has resulted in ‘Price fluctuations’ in the study area and it was agreed by the respondent followed by the ‘Technology’ and ‘Alternative usage (Credit facility)’.

10.4 AESTHETIC NEEDS

The next factor characterizing the purchase behaviour of gems and jewellery is named as ‘Aesthetic Needs’. A need of customers are satisfied by the variables like ‘Social status’ enjoyed, attractive ‘Appearance’ and ‘Gift’ value of gems and jewellery. The factor loading of ‘Status’ was .653, followed by ‘Appearance’ was .645 and ‘Gift’ was .580 as shown in the following Table 9.

TABLE 9 FACTOR 4 – AESTHETIC NEEDS

Sl. No	Variables	Factor Loading	Eigen Value	Percentage of Variance
1	Status	.653		
2	Appearance	.645	1.175	5.341
3	Gift	.580		

From the table 9 factors regarding, ‘Status’, ‘Appearance’ and ‘Gift’ were the factors with higher positive loadings on factor 4 are characterized “Aesthetic Needs”. Hence, F4 is termed as Aesthetic Needs. The eigen value for the above factor 4 was 1.175 and the

percentage of variance was 5.341. It is concluded that the influence of purchase of gems and jewellery based on Aesthetic Needs has resulted in ‘Status’ in the study area and it was agreed by the respondent followed by the ‘Appearance’ and ‘Gift’.

10.5 QUALITY

Another factor characterizing the purchase behaviour of gems and jewellery is named as ‘Quality’. The influence of quality on purchase behaviour is made to variables like ‘Best Quality’, ‘Guarantee’ and ‘Offer’ provided by the supplier. The factor loading of ‘Best Quality’ was .712, followed by ‘Guarantee’ was .642 and ‘Offer’ was .506 as shown in the following Table 10.

TABLE 10 FACTOR 5 – QUALITY

Sl. No	Variables	Factor Loading	Eigen Value	Percentage of Variance
1	Best quality	.712		
2	Guarantee	.642	1.092	4.966
3	Offer	.506		

From the table 10 factors regarding, ‘Best quality’, ‘Guarantee’ and ‘Offer’ were the factors with higher positive loadings on factor 5 are characterized “Quality”. Hence, F5 is termed as quality. The eigen value for the above factor 5 was 1.092 and the percentage of variance was 4.966. It is concluded that the influence of purchase of gems and jewellery based on quality has resulted in ‘Best quality’ in the study area and it was agreed by the respondent followed by the ‘Guarantee’ and ‘Offer’.

10.6 MIND SET

The preparedness of the customers to buy gems and jewellery mentally is known as ‘Mind Set’ of customers. ‘Atchaya Thrithiyay’ and ‘Family liking’ are the two variables which set up the mindset of consumer to buy gems and jewellery. The factor loading ‘Atchaya Thrithiyay’ was .734 and ‘Family liking’ was .589 as shown in Table 11.

TABLE 11 FACTOR 6 – MIND SET

Sl. No	Variables	Factor Loading	Eigen Value	Percentage of Variance
1	Atchaya Thrithiyay	.734	1.058	4.809
2	Family liking	.589		

From the table 11 factors regarding, ‘Atchaya Thrithiyay’ and ‘Family liking’ were the factors with higher positive loadings on factor 6 are characterized “Mind set”. Hence, F6 is termed as Mind set. The eigen value for the above factor 6 was 1.058 and the percentage of variance was 4.809. It is concluded that the influence of purchase of gems and jewellery based on mind set has resulted in ‘Atchaya Thrithiyay’ in the study area and it was agreed by the respondent followed by the ‘Family liking’.

10.7 BELIEF

The last factor influencing the behaviour of consumers of gems and jewellery is the ‘Belief’, they had before making purchase decision. The variables like predictions of ‘Astrology’ and persuasive and comprehensive ‘Advertisement’ built a strong belief in customers to buy gems and jewellery. The factor loading of ‘Astrology’ was .689 and ‘Advertisement’ was .644 as shown in the following Table 12.

TABLE 12 FACTOR 7 – BELIEF

Sl. No	Variables	Factor Loading	Eigen Value	Percentage of Variance
1	Astrology	.689	1.006	4.573
2	Advertisement	.644		

From the table 12 factors regarding, ‘Astrology’ and ‘Advertisement’ were the factors with higher positive loadings on factor 7 are characterized “Belief”. Hence, F7 is termed as Belief. The eigen value for the above factor 7 was 1.006 and the percentage of variance was 4.573. It is concluded that the influence of purchase of gems and jewellery based on belief has resulted in ‘Astrology’ in the study area and it was agreed by the respondent followed by the ‘Advertisement’.

TABLE 13 COMPONENT TRANSFORMATION MATRIX

Component	1	2	3	4	5	6	7
1	.528	.447	.369	.363	.359	.323	.141
2	-.258	.538	-.693	.046	.090	.160	.356
3	.117	.018	.267	-.144	-.464	-.194	.800
4	-.791	.109	.487	.257	.212	.008	.121
5	-.020	-.547	-.197	.604	-.198	.471	.189
6	-.072	-.218	.095	-.641	.274	.646	.184
7	.102	-.389	-.163	.057	.699	-.438	.357

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

The above table 13 reveals the factor correlation matrix. If the factors are uncorrelated among themselves, then in the factor correlation matrix, the diagonal elements will be 1's and off diagonal elements will be 0's. Since matrix was rotated with Varimax, barring some variables all other variables are found to have even if not zero correlations but fairly low correlation.

11 RELIABILITY ANALYSIS

Reliability is the consistency of a set of measurements or of a measuring instrument, often used to describe a test. Reliability is inversely related to random error. The reliability analysis was made by using test and retest method based on Cronbach's Alpha and Split Half Reliability.

11.1 Cronbach's Alpha

Cronbach's α (alpha) is a coefficient of reliability under test and retest method. It is commonly used as a measure of the internal consistency or reliability of psychometric test score for a sample of examinees. Cronbach's alpha will generally increase as the intercorrelations among test items increase, and is known as an internal consistency estimate of reliability of test scores. Because intercorrelations among test items are maximized when all items measure the same construct, Cronbach's alpha is widely believed to indirectly indicate the degree to which a set of items measures a single unidimensional latent construct.

It is the way to split data in possible way and compute the correlation coefficient for each and every split and it is the common measure to evaluate reliability. Cronbach's Alpha will generally increase when the correlations between the items increase. For

this reason, the coefficient is also called the internal consistency or the internal consistency reliability of the test. A value below 0.5 is terms as unsatisfactory.

TABLE 14 RELIABILITY STATISTICS – CRONBACH'S ALPHA

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items
0.83	0.83	22

Table 14 shows that, the interpreted value is to be 0.83, which is good enough and indicates that the scale is reliable and can be used in future.

11.2 Split-Half Reliability

A test given and divided into halves and are scored separately, then the score of one half of test are compared to the score of the remaining half to test the reliability. Split-Half Reliability is a useful measure when impractical or undesirable to assess reliability with two tests or to have two test administrations (because of limited time or money).

TABLE 15 RELIABILITY STATISTICS – SPLIT HALF RELIABILITY

Cronbach's Alpha	Part 1	Value	.683
	No. of Items	11 ^a	
Part 2	Value	.725	
	No. of Items	11 ^b	
Total N of Items		22	
Correlation Between Forms		.719	
Spearman-Brown Coefficient	Equal Length	.836	
	Unequal Length	.836	
Guttman Split-Half Coefficient		.834	

Note:

a. The items are: Advertisement, Family liking, Availability of Various Designs, Reliability on seller, Offer, Discounts, Best quality, Price fluctuations, Astrology, Investment, Atchaya Thrithiyay.

b. The items are: New models, Festivals, Status, Marriage, Guarantee, Beautification, Appearance, Gift, Technology, Trade fairs, Alternative Usage (Credit Facility).

In this scale, the 22 variables are divided into halves and then correlated. If there is high correlation between the halves, it shows that there is a high internal consistency. It can be seen from Table 15, the values are acceptable and it seems that the scale is acceptable.

12. CONCLUSION

The elegance of gems and jewellery places a high value in the minds of consumers. Gems and jewellery have become part and parcel of human life that exhibits beauty and results in cultural elevation. Therefore the demand for gems and jewellery is ever increasing. In fact, the natural beauty, brilliance, malleability and resistance to tarnish have made this yellow metal to attain a coveted position and increased acceptability among the people. India is the world's largest market for gold.

The results of the study projected above highlights the important factors that influence purchase behaviour of consumers of gems and jewellery, namely, motives, satisfaction, environment, aesthetic needs, quality, mind set and belief. *Thus the research brings to light that the designing and implementation of unique marketing efforts addressing towards the motives and needs, pure quality and price so as to influence the mindset and belief of the of consumers will bring desired purchase behaviour on the part of consumers of gems and jewellery not only in Virudhunagar district but also in other areas.*

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