

Factors Influencing the Buying Behavior of Gemstones and Yantras Among Households in West Bengal

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Abstract

The present research paper investigated the buying behavior of gemstones and yantras among households in West Bengal. Society has turned so competitive that every parent wants to give the best to their children so that they can fit in properly in this competitive world, and thereby achieve success. We are falling into distress due to numerous family-related problems. Pressures and tensions build up in every section of the society and it touches almost every person, whether it is a young or an aged person. Astrologers in India claim that they have a perfect solution to overcome all pressures and problems through gemstones and yantras. The study was based essentially on the primary data captured through a structured questionnaire and was administered to a total of 224 respondents. In order to find out the influencing factors behind the buying behavior of the respondents, factor analysis method was considered appropriate. The present study investigated the socioeconomic status of the households, when, and under whose influence they started using gemstones and yantras. The result of the analysis suggested that Parents' Influence, Trust in Deity, and Impact of Society were the three main factors that convinced the respondents into believing in such gemstones and yantras.

Keywords: gemstones, yantras, astrological science, rat race, factor analysis

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In the modern era, we live in a very competitive society. Globalization has become the power house of change in the modern world. The process of globalization accelerates the level of interdependence and competitiveness among nations, and thus, the impact falls on every sphere of life. We need to give a good shape to our career so that we can secure our future (either in service, or in business, or in both). Parents try to provide all possible best opportunities to their children so that their children can have a bright career. The humongous expectations of parents, teachers, relatives, and neighbours from their children create an enormous pressure on them. So, not only the young men and women, but children are also entering into the 'rat race' at an early age of their lives.

Psychologists claim and warn that the negative consequences of being a rat in a rat race are far reaching. As we grow up to become adult human beings, the levels of stress also increase. Young boys and girls have a pressure to get a good job, and once they get a good job, then there is new pressure to retain that job. Those who have started their own enterprise, they want to attain success in the same. Parents are anxious about the health-related problems of their children ; people also fall into distress due to numerous family-related problems. Pressures and tensions build up in every section of the society and they touch almost every person, whether it is a young or an aged person. Astrologers in India claim that they have a perfect solution to overcome these pressures and problems. They have been able to significantly influence children, young boys and girls, and their parents. It is observed that their popularity is growing gradually. The huge market prospects for gemstones and yantras in India can be clearly understood by the way they are promoted and publicized by the astrologers through various forms of advertisements, which include television, radio, newspapers, and so forth.

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As per astrological science, gemstones bring good luck, and Hindus particularly associate astrology with fortune, spirituality, and religious beliefs. In India, religion is considered to be a part and parcel of one's life, and it has a very important role to play. As we grow, several cultural values and religious beliefs are inculcated in us by our parents, friends, and relatives. Overcoming or going against such beliefs and traditions is not an easy task.

Literature Review

The jewellery business in India is gradually gaining prosperity as gems and jewellery continue to occupy an essential part of our rich Indian heritage (India Brand Equity Foundation, 2012). According to an A. T. Kearney Report (2013), the native market for gems and jewelry witnessed an enormous growth till 2013 when the market size was around ₹ 251000 crores and has the potential to experience further growth to ₹ 500000- ₹ 530000 crores by the year 2018. Apart from ornamental purposes, the demand for gems and jewelry is increasing in India because a considerable number of people in India believe in astrology. The use of gems and yantras is growing as they are believed to be associated with good life, health, and economic prosperity. According to the website of Hindu Astrology, wearing different gemstones influences the position of stars and planets and strengthens their positive facets in the horoscope (Singh, 2011). The position of these stars and planets at the time of our birth, in turn, influences our entire life and destiny.

According to Vedic Astrology (Flaherty, 2013), gems can affect human body either constructively or adversely. Various gemstones are available, which are believed to have different positive effects on human life. We generally take the help of astrologers in this regard who possess expert knowledge and suggest the gemstone that is most suitable for an individual.

Yantras holds a very propitious place in Hindu mythology and have been used to signify the cosmological position of stars and planets over a particular period of time. These are generally drawn upon papers, stones, metal plates, or alloys. It is again believed that the positions of planets constantly govern our emotions and actions, which in turn govern our fortune and destiny. The processes of making yantras are described in the Vedas, and they play an important role in tantric practices as well (Rana, 2012). After becoming aware of the various benefits offered by yantras, people started to make a living through their sale, and have even used the same themselves for their own benefits (Rana, 2012).

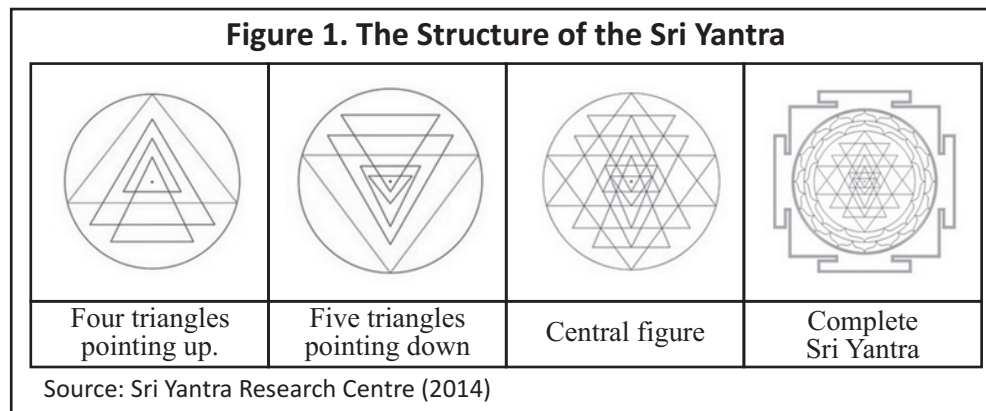
Witherspoon (2005) did a commendable work in this regard by experimenting with sacred geometries and particularly the Sri Yantra, the results obtained by which have restored the faith and belief of people in it. The work was also published in form of paper and was titled *Art as Technology: Oregon Desert Sri Yantra*. The Sri Yantra, after being drawn, is believed to have caused deep and intense alterations in consciousness, noteworthy changes in weather and soil, and it is even possible for a group of blind people to discover a concealed Sri Yantra.

In the pages of history, we will find that astrology has occupied an important place in major religions like Hinduism, Buddhism, Islam, and Christianity (Schoener, 2009). But few Islamic scholars hold the opinion that practicing astrology is equal to practicing sin. According to them, consulting an astrologer, buying books on astrology, or even carrying out the profession of an astrologer is prohibited (Al-Hidaayah Foundation, 2009).

If we consider this from the marketing perspective, we will find that our buying decisions are influenced by our culture, community, and psychology (Kotler & Armstrong, 2004). Our society and culture are so highly dominated by religion and astrology that they have started playing a dominant role in determining our purchases. Our attitudes, beliefs, and conduct are influenced by the religion we follow so much so that even the products we buy symbolize our spiritualism and celebration (Schiffman & Kanuk, 2007).

The Structure of The Sri Yantra

The Figure 1 shows that the Sri Yantra comprises of a central figure composed of nine triangles overlapping with each other around a central point popularly known as *bindu*, which signifies the interplanetary seed or the basic



source of every form of creation. The *bindu* is enclosed by two spherical rows of petals, which are further surrounded by a rectangular shaped *bhupura*.

Four of the nine triangles are pointed upwards, which symbolize the element of *Shakti* while the remaining five, pointed downwards, symbolize that of *Shiva*. The feminine force is represented by *Shakti*, whereas the masculine force is represented by *Shiva*. Therefore, the entire universe seems to be embraced by the Sri Yantra in its design. Its most popular formation involves the two largest triangles meeting the outer circle on all three points.

The nine triangles are interconnected in many ways. In fact, every triangle is linked to more than one triangle through some common points. So, if the position of one triangle is changed, the location and size of other triangles will also need an alteration. The two largest triangles are connected to the outer circle on all three points, and the peak of each triangle touches the base of another. The exact centre of the inmost triangle should consist of the *bindu* point (Sri Yantra Research Centre, 2014).

Different types of Sri Yantra are available in the market. To completely define the Sri Yantra, the conditions of concurrency are not just enough. Since long, it has been believed that in order to form a unique figure, meeting of lines precisely at the interconnections while forming a figure is necessary. This has currently resulted in diversity of figures available.

Influence of the Sri Yantra and Gemstones

According to Rudra Centre (2014), the Sri Yantra is considered to be one of the most favourable, influential, and important yantras, which gives maximum advantage, proves to be beneficial and valuable for nearly everyone. It is the secret behind the attainment of all worldly requirements and the fulfillment of all wants and desires through the power of inner cosmic rays and intellectual strength. “Sri Yantra”- Sri or Shree means wealth and Yantra signifies instrument and hence, it is deemed to be the instrument of wealth. It is the harbinger of physical and divine wealth. It contains unlimited power to satisfy our wants and desires and change our life for the best. It seeks to answer all questions related to the negativity and pessimism in our lives.

According to the *rishis* and sages, when a shape is designed and structured appropriately, it embraces the universe as a whole in its domain along with all natural forces operating within it. According to them, everything that is present in the outer world is integrally there in the inner world as well, that is, everything that exists in the macrocosm is also there in the microcosm. In the same way, whatever exists in the spiritual dominion gets replicated in the physical dominion. In order to portray the different planes of existence, the circles on which triangles are designed, protrudes from the main *bindu* in the Sri Yantra. These planes are basically the depictions of the variety of proportions of the universe. Triangles that face upwards receive positive energy by pointing towards the heaven and thus signify receptivity. Likewise, the downward facing triangles signify aggression. They seem to bestow their energies on the feminine facet of creation. When all these triangles combine, there seems to be a state of harmony that is depicted by the Sri Yantra.

Likewise, gems and crystals originate from mother Earth. They are active and bright, and have the intelligence that nature bestows within every cell of their body. Gems are considered the most powerful tools of medicine due to their immense energies and deep resonance with the human body. The energy medicine from gemstones, just like any other type of energy medicine, uses our body's intrinsic healing force to treat, heal, and sustain us in different ways. These gemstone therapies not only work as primary healers, but also as complements to other treatment methods. These medicines from gemstones have been successful in treating emotional and psychological constraints, chronic diseases, and other kinds of illnesses in the most exciting ways.

Objective of the Study

The present study is exploratory in nature and aims to investigate the buying behavior of gemstones and yantras among households in West Bengal. It was observed that a significant number of people, irrespective of age, use gemstones and yantras nowadays. So, the objective of the study is to find out the factors which influence the buying decisions of gemstones and yantras by the households in West Bengal.

Methodology

For the present study, a survey based research was adopted. In order to achieve the objectives of the research, a structured questionnaire was designed and supplied to the respondents for collecting the primary data. Here, respondents are different sections of people, like school and college students, service class and businessmen and businesswomen, home makers, and retired persons. The survey was conducted for over a period of three months (July - September 2013). Purposive sampling methods were adopted to focus on particular characteristics of a population that are of interest so that the research questions could be answered. The questionnaires were distributed among those persons who had been using gemstones and yantras.

Out of the 300 questionnaires that were distributed, 224 were found to be complete and were used for the data analysis. The questionnaire used in the present research consisted of two parts: the first part enclosed questions regarding the demographic information and socioeconomic information of the respondents, and the second part contained questions measured on a 5- point Likert scale. These were used for factor analysis to find the factors which were responsible for the buying decisions of the respondents. The demographic variables collected from the survey included, age, gender, education, marital status, and combined family income. The descriptive statistics of the variables used in the study are presented in the Table 1, and the percentage distribution of the respondents by some socioeconomic and demographic variables is presented in the Table 2.

The data so collected were captured in SPSS 18 version for analysis and interpretation. Furthermore, in order to address the objectives of the study, principal component analysis (PCA) with orthogonal rotation (varimax) was used. To justify the factor analysis, the Kaiser- Meyer-Olkin (KMO) test for sampling adequacy and Bartlett's test of sphericity were used (Hair, Anderson, Tatham & Black, 1998).

Analysis and Results

Out of 224 respondents, 51.8% were men and 48.2% were women ; 57% of the respondents were married, 36% were unmarried workers, and 7% were widows. Therefore, as compared to unmarried people, a significant percentage of married people believed in gems and yantras. The average age of the respondents was 34.10 years, which varied between 16 years and 66 years. I have categorized the age of the respondents into three groups: less than 21 years, 22-30 years, and above 30 years. The maximum number of respondents were in the above 30 years age group. Education wise, I have categorized the respondents into three groups: secondary (up to 10 years), higher secondary (11- 12 years), and graduate and above (13 years and above). The average education attained by the respondents was for 12 years, which varies between 2 to 17 years.

Table 1. Descriptive Statistics of Selected Characteristics of the Respondents

Variable Name	Mean	Minimum	Maximum	Standard Deviation (σ)
Age	34.10	16	66	12.21
Education	12.15	2	17	3.13
Combined family income	18375.0	5000	50000	8322.13

Table 2. Percentage Distribution of Selected Respondents

Variable Name	Description	%
Gender	Male	51.8
	Female	48.2
Religion	Hinduism	100.0
	Others	0
Age (Years)	Less than equal 21 years	22.3
	22-30	24.6
	Above 30	53.1
Education (in number of years)	Secondary Education (10 years)	34.0
	Higher Secondary Education (11-12 years)	38.8
	Graduate and above (above 13 years)	27.2
Marital Status	Married	57.0
	Unmarried	36.0
	Widow	7.0
Combined Family Income (₹/month)	Less than equal ₹ 10,000	19.6
	₹ 10,001- ₹ 20,000	55.4
	Above ₹ 20,000	25.0

Hence, it is observed that maximum respondents had completed their higher secondary education. A majority of the respondents (approx 83%) who started using gems and yantras were those who had either completed secondary or higher secondary education. The average combined family income was ₹ 18,375 per month. Majority of the families (55.4%) earned between ₹ 10,000 - ₹ 20,000 per month and 25% of the families had a monthly income above ₹ 20,000. So, a majority of the respondents who were using gems and yantras came from lower middle-class families. It is the middle class all over the world who hold traditional values and cultural norms very dearly to them. It is interesting to note that 100% of the respondents who were using gems and yantras were Hindus. Hinduism believes in astrology to a great extent and also believes that gemstones and yantras can solve some problems if one uses them according to the suggestions of an astrologer. During the survey, it was observed that some of the respondents had both parents as well as siblings wearing gems. The culture of some families is greatly influenced by astrology and astrologers. In India, especially in West Bengal, most of the jewelry shops provide the services of some self-proclaimed 'great' astrologers.

The respondents were asked about who influenced/advised them to wear gems. There were 10 items (Table 4) on a 5- point Likert scale ranging from *strongly agree* to *strongly disagree* in the questionnaire. The respondents were requested to tick the appropriate response. To find out which factors influenced them more, factor analysis was carried out. The factor analysis extracted a small number of factors (3) from a large number of variables (10) which are capable of explaining the observed variance. To justify the factor analysis, KMO test and Bartlett's test of sphericity were conducted (Table 3). The KMO value of 0.599, which is well above the acceptable limit of 0.5 (Field, 2009) indicates that the factor analysis was appropriate. The chi-square (χ^2) value 1122.751 with 45 degrees

Table 3. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.599
Bartlett's Test of Sphericity	Approx. Chi-Square	1122.751
	df	45
	Sig.	.000

of freedom at a significance level of 0.000 specifies that correlations between items were sufficiently large for PCA (Field, 2009).

Since I conducted principal component analysis, so multicollinearity was not a problem for the data. However, the determinant value of R-matrix (or correlation matrix) test for multicollinearity should be greater than 0.00001. In the present analysis, the value of the determinant is 0.006. So, multicollinearity is not a problem in the study.

An initial analysis was run to obtain eigen values of all the components in the data, the variance explained by each component and the cumulative variance was calculated. To determine how many components are to be retained, several procedures have been suggested, such as the use of eigen values, scree plot, percentage of variance, and so forth (Malhotra & Dash, 2007). The eigen value approach suggests only components with eigen values over 1 are retained (Kaiser's criterion). The present study indicates that only three components have eigen values greater than 1, and in combination, they explained 65.881% of the total variance. The first component accounts for 26.681% of the variance, while the second and third components interpret 23.336% and 15.864%, respectively of the total variance. All the remaining components are not significant. The scree plot (Figure 2) is used to describe how many variables should be retained in the analysis. From the figure, it is observed that a distinct break occurs at three factors, and it appears to be reasonable. In order to easily interpret the factors, the rotated component matrix was obtained, which contains the coefficients obtained by using varimax rotation. Coefficient of the component matrix can be used to interpret the components. A coefficient with a large absolute value indicates that the component and the variable are closely related. The Table 4 shows the components of the three factors.

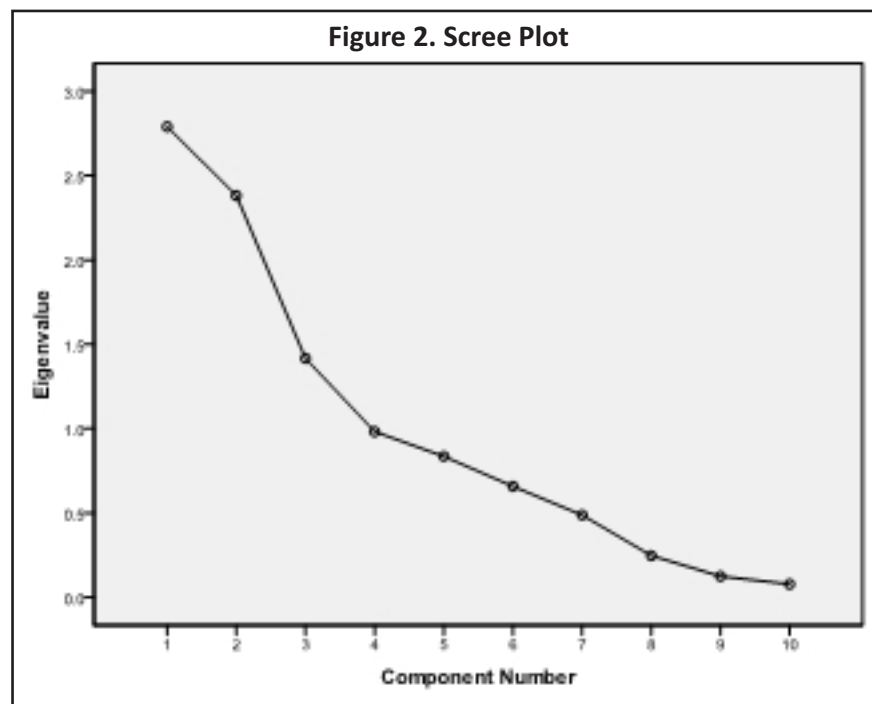


Table 4. Summary of Exploratory Factor Analysis Results (N = 224)

Variables	Component 1	Component 2	Component 3
Father's influence	.923		
Mother's influence	.925		
Influence from both father and mother	.963		
Faith in God		.916	
Media influence		.871	
Believe in Luck		.644	
Friend's influence			.703
Self- motivated			.584
Celebrities are using			.581
Relative's influence			.565
Eigen values	2.668	2.334	1.586
% of Variance	26.681	23.336	15.864
Cumulative %	26.681	50.017	65.881
Extraction Method: Principal Component Analysis.			
Rotation Method: Varimax with Kaiser Normalization. Rotation converged in 4 iterations.			

The first factor has been named as Parents' Influence since all the variables under this factor are directly related to each other, that is, "Father's influence (.923)," "Mother's influence (.925)," and "Influence from both father and mother (.963)". The second factor encompasses the variables, "Faith in God (.916)," "Media influence (.871)," and "Believe in luck (.644)". These variables are primarily associated with trust in God and this trust becomes stronger as the media acts as a catalyst, where due to commercialization, sellers of gems and yantras are constantly advertising their products on different media channels. Advertisements propagate a sense of belief in these products to a section of people who are physically and mentally disturbed in their lives. I named this second factor as Trust in Deity. The third factor consists of variables "Friend's influence (.703)," "Self- motivated (.584)," "Used by celebrities (.581)," and "Relatives' influence (.565)". People are greatly influenced by their peers, relatives, and celebrity personalities. These variables are mainly associated with the society, and therefore, the third factor is named as Impact of Society.

Conclusion

The study analyzed the factors influencing the buying decisions of gemstones and yantras by the households in West Bengal. The survey revealed that gemstones and yantras are used by a large number of people in West Bengal. A good number of people even wear manifold gems, which are believed to have diverse benefits on their health, career, and other aspects of their lives. The results of the study show that there are three factors that influenced the buying decision of gemstones and yantras - namely, Parents' Influence, Trust in Deity, and Impact of Society. It is quite evident from the results that among the various sources of influence, parents' influence plays a vital role in the choice of their children's career. They face hardcore competition in their academic life. Studies also show that particularly in the middle class families, parents remain highly concerned about their children's career and hence, insist that the latter wear such gemstones.

When students, after qualifying the higher secondary examination, sit for several competitive exams for admission into different institutes to pursue the career of their choice, they resort to wearing/possessing gems and yantras, which are highly trusted for bringing good luck and success. Human beings, named after social animals, are so much a part of society that they are always influenced by the way their society thinks and works. Every social contact (close friends, relatives, and celebrities), communication, and interaction tends to influence an individual's

belief and knowledge. Under the impact of society, the variables that have been found most important in influencing the purchase of gemstones are relatives' and peers' influence, influence of celebrities, and one's own faith and belief.

Belief in luck is accentuated either when we suffer from some adverse situations or dream of achieving something good in life. Mostly, people depend on astrology in times of adversities and danger. This brings opportunity for the astrologers to perfectly demonstrate and advertise through television, magazines, and other forms of media. These advertisements and publicity affect every member of the society starting from the employed persons to the home makers, aged ones, and others. It is because of various forms of mass media that every piece of news highly affects consumer behavior (Shiffman & Kanuk, 2007). From the results, it is clear that media influence and faith in God with high correlation of .871 and .916, respectively were considered highly influential in the buying behavior of gemstones and yantras. Thus, households in West Bengal are influenced by various sources which influence them to purchase gemstones and yantras.

Managerial Implications

Studies show that parental authority, society, and trust in god strongly influence the choice and purchase of gemstones and yantras. Such results, from a managerial perspective, present an appropriate framework to understand the buying behavior of the purchaser and manage a buyer's satisfaction and trust to purchase high involvement products, like gems and yantras.

The results of this study could strategically influence three main parties- sellers, buyers, and the market itself. Firstly, the sellers can utilize this knowledge and devise effective strategies so as to satisfy the purchasers of gems and yantras in different market segments. Strategic plans must be devised by the marketers so as to deal effectively with sales management such as expansion of business by providing both precious and semi-precious gemstones and also a range of yantras having different features. From the perspective of a buyer, the application of strategies by the sellers brings forth a more modified environment for the buyers and thus satisfies their needs. Finally, these results show the increasing level of dependency of households on gems and yantras over time and an augmented rate of growth and development in their trade.

Limitations of the Study and Scope for Further Research

As any other study, this paper is not free from data limitations. The study was conducted with a small sample size of 224 respondents. Studies with large heterogeneity samples drawn across the country may give more accurate results. The findings of the study provide further impetus to the existing evidence towards the impact on users for using gemstones and yantras. The research could also examine the impact of demographic and socioeconomic variables on buying decisions of the consumers. Future studies can also analyze the consumers' perception towards branded and non-branded gemstones and yantras.

References

- A. T. Kearney. (2013). *All that glitters is Gold: India jewellery review*. Retrieved from <http://www.ficci.com/spdocument/20332/India-Jewellery-Review-2013.pdf>
- Al-Hidaayah Foundation. (2009). *The Islamic ruling on horoscopes*. Retrieved from <http://www.ummah.com/forum/showthread.php?24900-The-Islamic-Ruling-on-Horoscopes>
- Field, A. (2009). *Discovering statistics using SPSS* (pp. 630 - 671, 3rd ed.). New Delhi: Sage Publications Limited.

- Flaherty, D. (2013). *Astrological gemstones*. Retrieved from <http://www.astrologicalgem.com/jyotish-gemstones-article.php>
- Hair, J.F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). *Multivariate data analysis* (pp. 100 -103, 5th ed.). New Jersey: Prentice Hall.
- India Brand Equity Foundation (IBEF). (2012). *Gems and jewellery*. Retrieved from <http://www.ibef.org/archives/detail/b3ZlcnZpZXcmMzExMDgmNDM4>
- Kotler, P. & Armstrong, G. (2004). *Principles of marketing* (pp. 50-200, 10th ed.). New Jersey: Pearson Prentice Hall.
- Malhotra, N. K., & Dash, S. (2007). *Marketing research: An applied orientation* (pp. 613 - 630, 5th ed.). New Delhi: Pearson Education India.
- Rana, D. (2012). *Yantra, mantra and tantrism: A complete guide book* (pp. 5-200). USA: Neepradaka Press.
- Rudra Centre. (2014). *Sri Yantras benefits from Rudraksha Ratna*. Retrieved from <http://www.rudraksha-ratna.com/shreeyantra.htm>
- Schiffman, L. G., & Kanuk, L. L. (2007). *Consumer behaviour* (pp. 125 - 200, 9th ed.). New Delhi: Pearson Prentice Hall.
- Schoener, G. A. (2002). *Astrology: Between religion and the empirical*. Retrieved from <http://www.esoteric.msu.edu/VolumeIV/astrology.htm>
- Singh, S. (2011). *Gems and remedies*. Retrieved from <http://www.hinduastrology.com/astrology/readarticle/Gems%20And%20Remedies>
- Sri Yantra Research Centre. (2014). *Solving the Sri Yantra*. Retrieved from http://www.sriyantraresearch.com/Optimal/optimal_sri_yantra.htm
- Witherspoon, B. (2005). *Art as technology: Oregon Desert Sri Yantra* (pp. 1-24). USA: MIT Journal Press.