



PERSONALITY AND MEMORY RETENTION

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ABSTRACT

Indian philosophy conceptualizes Trigunas (Sattva-representing knowledge, Rajas-activity, Tamas-inertia) are the source of the personality. Predominance of a particular guna determines the individual's personality characteristics. In fact each and every action and behaviour can be classified as being a representation of one of the three gunas. Cognition is a mental process through which internal and external behaviors of an individual can be understood. Therefore the present research paper is an effort to investigate the difference of short term memory among three Gunas. The sample of 100 respondents was randomly selected from Collage of Agra and adjacent areas on the basis of gender, age range and socio-economic status. For measuring Gunas 'Gita Inventory of Personality' by Das (1991) and Short Term Memory measured by Asthana (1982) were used. In order to find out the difference t-test is applied. The findings of present research shows that 't'-values between Sattva and Rajas gunas ($t=3.35$), between Rajas and Tamas gunas ($t=5.01$) and between Sattva and Tamas gunas ($t=7.95$) of Short Term Memory are significant at $0.01(p<, 0.01)$ level. It shows that there is a significant difference of Short Term Memory due to Gunas.

Keywords-: Rajas Gunas, Sattva Gunas, Short Term Memory and Tamas Gunas,

1.INTRODUCTION

Personality is the particular combination of emotional, attitudinal, and behavioral response patterns of an individual. It can be defined as a dynamic and organized set of characteristics possessed by a person that uniquely influences his /her cognitions, motivations and behaviors in various situations. Personality is normally a combination of the various personality types yet in each individual there is one characteristic which dominants his personality and he behaves accordingly.

Indian philosophy conceptualizes Trigunas (Sattva. Rajas, Tamas-representing knowledge, activity, inertia) are the source of the personality. The personality deals with the tri-dimensional classification of Gunas entailing physical, mental, and spiritual elements of personality and the relationship between Gunas and well-being indicators such as psychological capital, personality, life satisfaction and subjective happiness.



“The word “*Guna*” has many connotations. Its two most common and connected usages are “quality” and “constituent”. It is in this sense that the Yoga and *Samkhya* schools refer to it and it means the well-known triad of forces *sattva*, *rajas* and *tamas*, which are thought to be the building blocks of nature. The term “*sattva*” has been derived from the root ‘sat’ which means “being” and is said to be difficult to be translated into English but it has been variously translated as lightness, illumination or intelligence ^[1]. The word “*rajas*” is derived from the root ‘raj’, meaning to be colored, affected, excited and charmed. It is the principle of movement or energy. *Tamas* (darkness) is said to refer to the principle of inertia.

Memory is defined as the processes of storing and preserving newly acquired information for later recall. Otherwise it is also referred to the process of recalling a specific experience or the total collection of remembered experiences stored in an individual’s brain. Short-term memory allows us to retain information for a brief period of time, a small amount of information in mind in an active. Most people can repeat 6 or 7 digits or letters perfectly almost every time, but few can consistently repeat more than 7. A study ^[2] & ^[3] attempted to identify the personality types based on *trigunas* to memory and extra-sensory perception. Results showed a significant negative correlation between scores of memory and *Tamas*. There was a significant negative correlation between scores of extra-sensory perception and *Tamas*. A study established the relationship between *trigunas* and emotional and behavioural problems ^[4]. They found that *sattva gunas* was negatively correlated with emotional and behavioural problems while *rajas* and *tamas gunas* were positively associated. Correlations between attention and *gunas* were related to cognitive characteristics ^[5]. Negative correlations are reported between *tamas* and field independence ^[6], memory, intelligence and attention-concentration and positive correlations between *sattva* and general intelligence, short-term memory and attention-concentration. Ability to focus attention correlates positively with *sattva*, and negatively with *tamas* ^[7]. Higher levels of mastery and self-efficacy were associated with better memory function while high neuroticism was associated with poor memory ^[8]. A study also found that there was a positive relation between healthy adults of personality trait of openness and cognition abilities ^[9].

II METHOD

II.1 Objective

To study the difference of short term memory between different personality dimensions.

II.2 Hypotheses

1. There is no significant difference of short term memory between students of *sattva* and *rajas gunas*.
2. There is no significant difference of short term memory between students of *rajas* and *tamas gunas*.
3. There is no significant difference of short term memory between students of *sattva* and *tamas gunas*.



II.3 Sample

In the present research, 100 residential Intermediate students (50 boys and 50 girls), who were randomly selected. Their age range were between 16 to 19 years. The sample was matched on the basis of gender, age, education and socio-economic status. The Sample was selected from Agra and the adjacent areas.

II.3.1 Inclusion criteria

- Age: 16 to 19 years
- Students from Residential intermediate College.
- At least 3 years education from the same education system.
- High school academic achievement ranges from 55 to 85%.
- Middle socio-economic status (Family Income- Rs.20,000 to 50,000 per month)

II.3.2 Exclusion criteria

- Subjects with any chronic ailment
- Substance abuse and Smokers

II.4 Tools

Short Term Memory ^[10]

Short Term Memory scale was designed by Asthana (1982). In this scale 24 trigrams prepared in such a way that eight CVCs have an association value of more than 80 (72 to 97; M=81; High association value); eight CVCs have an association value of 45 (moderate average value); and eight CVCs have an association value less than 8 (3 to 13; M= 8.10; low average). These 24 CVCs are randomly assigned to the presentation and test phase.

Gita Inventory of Personality ^[11]

Gita Inventory of Personality is based on the concept of Gunas (personality) from the Bhagavadgita, a traditional text of yoga. This inventory was developed by Das in 1991 and measures three Gunas containing ten questions that have three response choices. This test has a test-retest of 0.60 with a confidence level of 99% and has been validated. This is a valid tool for identifying the types of personality. The score value of weightage of an item indicating Sattva is 3, for an item indicating Rajas is 2, and for an item indicating Tamas is 1. It classifies people as being predominantly of Sattva, Rajas, or Tamas type, depending on their total score on the test.

Scoring: Scoring will be done according the answer key related to this test.

III Statistical Analysis & Interpretation of Data

't- test' has been used in the present research.

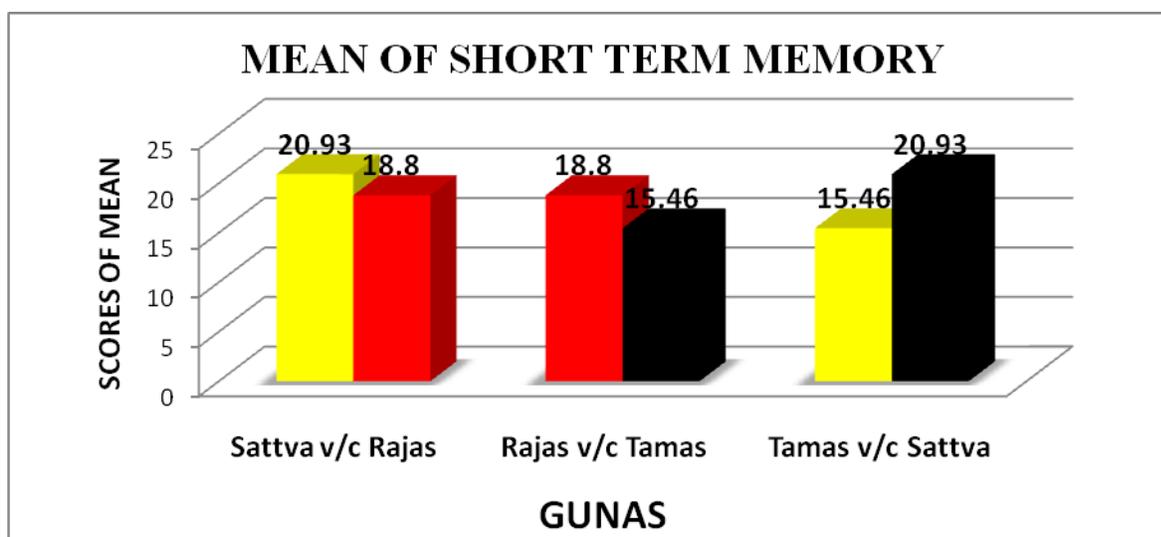


RESULT:

III.1 TABLE: Gunas and Short Term Memory of students

Short Term Memory	N	Mean	S.D	t- Value
Sattva v/c	15	20.93	1.53	
Rajas	59	18.80	2.80	3.35**
Rajas v/c	59	18.80	2.80	
Tamas	26	15.46	2.92	5.01**
Tamas v/c	26	15.46	2.92	
Sattva	15	20.93	1.53	7.95**
Total	100			

** $p < 0.01$



III.1 FIGURE: Graph showing the difference of Short Term Memory between different Gunas

The finding of the present study reveal that the mean value of short term memory of *sattva* students is 20.93 which is better than short term memory mean scores of *rajas gunas* i.e. 18.80. *t*-value between *sattva* and *rajas gunas* ($t= 3.35$) is significant at 0.01 ($p<, 0.01$) level. This result indicates that *sattva gunas* students are better in short term memory as compared to *rajas* students. Similarly, the mean value of short term memory of *rajas* students is 18.80 which is better than short term memory mean scores of *tamas gunas* i.e. 15.46. Further *t*-value testing the significance of mean difference of short term memory between *rajas* and *tamas gunas* ($t= 5.01$) is significant at 0.01 ($p<, 0.01$) level and short term memory of *sattva* students is 20.93 which is better than short term memory mean



scores of *tamas gunas* i.e. 15.46. *t*-value testing the significance of mean difference of short term memory between *sattva* and *rajas gunas* ($t= 7.95$) is significant at 0.01 ($p<, 0.01$) level. These results indicate that *sattva gunas* students are better in short term memory as compared to *rajas* and *tamas* students.

III DISCUSSION

The present result shows that there is a difference of short term memory between different *gunas*. It suggests that short term memory in students of *sattva gunas* is better than *rajas gunas*, short term memory in students of *rajas* is better than *tamas gunas* and students of *sattva* are better than *tamas gunas*. A study ^[2] & ^[3] found a significant negative correlation between memory and *Tamas* in students. A similarly study ^[4] also found that *sattva* was negatively correlated with emotional and behavioural problems while *rajas* and *tamas* were positively associated. Negative correlations are reported between *tamas* and field independence, short-term memory, intelligence and attention-concentration and positive correlations between *sattva* and general intelligence, short-term memory and attention-concentration. Ability to focus attention correlates positively with *sattva*, and negatively with *tamas* ^[7]. *Sattvic* people have manifested fully developed awareness, very clear perceptions and cognitions, abstract thinking and intuition because *sattvic* people includes cleanliness, truthfulness, dutifulness, detachment, discipline, spiritual, etc. in behavior. *Rajasic* people have awareness, sharp perceptions, factual and tangible thinking, with an emphasis on direct knowledge because this personality includes in behaviour the intensive activity, desire for sense gratification, dissatisfaction, jealousy and materialistic mentality. Further *tamasic* type people have misty, delusions, hallucinations, confabulations, feeble or defective memory and poor attention because they mainly have anger, arrogance, depression, laziness, feeling of helplessness, etc. and in this study found that *Introverts* were significantly superior on digit span tasks and *extroverted* were significantly more accurate on facial expressions ^[12]. The difference in memory between *Introverts* and *Extroverts* was also investigated that the *extrovert* personality had a better short-term memory as compared to *introverts*' personality ^[13].

IV CONCLUSION

The *gunas* is primarily responsible for our predominant traits, actions and modes of behavior. It helps the mind, body and the soul to fulfill the requirements of cognition effectively. Therefore, it can be claimed that present research is a milestone to study the difference short term memory between different personality dimensions and can be concluded that the students of *Sattva gunas*, one of the personality dimensions has better short term memory as compared to other personality dimensions i.e. *rajas* and *tamas gunas*.

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REFERENCES

- [1] Dasgupta and Surendranath, *A history of Indian philosophy*, New Delhi: Motilal Banarsidass Publishers, Pvt Ltd, (1), 1922, 978-981
- [2] M. Sitamma, P.V.K. Rao, and P.V.K. Rao, Three Gunas and Cognitive Characteristics : Study of Memory and Extrasensory Perception, *Journal of the Indian Academy of Applied Psychology*, 21(2), 1995, 185-191
- [3] P.V.K. Rao, and K. Harigopal, The Three Gunas and extra-sensory perception: An Exploratory Investigation, *Journal of Indian Psychology*, 2(1), 1979, 63-67.
- [4] G.M.A. Das, and D.V.V. Gopal, Trigunas and Psychological Problems, *Journal of Indian Psychology*. in press
- [5] M. Sitamma, Three gunas, cognitive characteristics and self-actualization, Unpublished doctoral dissertation. India: Andhra University, 1997.
- [6] M. Sitamma, K. Sridevi, and P.V.K. Rao, Three gunas and cognitive characteristics: A study of field dependence-independence and perceptual acuity, *Journal of Indian Psychology*, 13, 1995, 13-20
- [7] M. Sitamma and P.V. Rao, Three gunas and cognitive characteristics: A study of memory and extrasensory perception, *Journal of Indian Academy of Applied Psychology*, 21, 1956, 185-191.
- [8] .. Ruth, et al., The impact of personality on memory function in older adults—results from the Longitudinal Aging Study Amsterdam, *International Journal of Geriatric Psychiatry*, 2016.
- [9] A. Soubelet and T. A. Salthouse, Personality-cognition relations across adulthood, *Developmental Psychology*, 47(2), 2011, 303-310
- [10] B.B. Asthana, Human memory & experimental procedure, published by National Psychological Corporation. Agra, 1982.
- [11] R.C. Das, Standardization of the Gita inventory of personality, *Indian Journal of Psychology*, 9, 1991, 47–54.
- [12] R. Carlson, and N. Levy, Studies of Jungian typology: I. Memory, social perception, and social action. *Journal of Personality*, 41(4), 1973, 559-576
- [13] K. Fiza, *Memory & personality*. Science Project, 2014 Web sited- <https://prezi.com/ipgezfo7dcq/memory-personality/>