CHAPTER 6

DATA EXTRACTION AND ANALYSIS

Data was collected through two questionnaires. 1) Big Five Personality Inventory (BFI) and 2) Vedic Personality Inventory (VPI) for both Intervention group and Control group. Data was collected three times, before Intervention i.e, on October 1st 2014( Pre), in the middle of the study i.e on December 1st 2014(Mid ), at the end of the study i.e., on 31st January 2015 (End )

The three questionnaires were filled up by the subjects on the dates specified above. Both the questionnaires were given to the participants on the same day. A separate group was assigned to distribute the questionnaires and collect the filled in forms from participants, so that masking or blinding was achieved in this study.

To intervention group, the questionnaires were distributed and were asked to fill the same on the specified dates above at the venue of Yōga centre before doing Yōga. Collecting the datasets required considerable efforts especially with participants of Control group, data has to be collected from them individually at their offices in their free time.

6.1 Scoring Procedure for Big Five Personality Inventory (BFI) :

The BFI contains 44 questions. It is a five point likert type scale. Each point denotes the following.

1- Disagree Strongly
2- Disagree a little
3- Neither agree nor disagree
4- Agree a little
5- Agree strongly

The 46 questions pertain to different dimensions as follows.

Openness – 10 questions

Conscientiousness – 9 questions

Extraversion – 8 questions

Agreeableness – 9 questions

Neuroticism – 8 questions

**Scoring Instructions for BFI**

To score the BFI, reverse-scoring of all negatively-keyed items were done, which were as follows:

Extraversion: 6, 21, 31

Agreeableness: 2, 12, 27, 37

Conscientiousness: 8, 18, 23, 43

Neuroticism: 9, 24, 34

Openness: 35, 41

To recode the above reverse scored items, the score for them is subtracted from 6. That is, a score of 1 becomes 5, 2 becomes 4, 3 remains 3, 4 becomes 2, and 5 becomes 1. Then scale
scores were created by averaging the following items for each B5 domain (where R indicates using the reverse-scored item).

Extraversion: 1, 6R 11, 16, 21R, 26, 31R, 36

Agreeableness: 2R, 7, 12R, 17, 22, 27R, 32, 37R, 42

Conscientiousness: 3, 8R, 13, 18R, 23R, 28, 33, 38, 43R

Neuroticism: 4, 9R, 14, 19, 24R, 29, 34R, 39

Openness: 5, 10, 15, 20, 25, 30, 35R, 40, 41R, 44

6.2 Scoring Procedure for Vedic Personality Inventory (VPI):

VPI contains 56 items. It is a seven point likert type scale. Each point denotes the following

1: Very Strongly Disagree

2: Strongly Disagree

3: Somewhat Disagree

4: Neutral

5: Somewhat Agree

6: Strongly Agree

7: Very Strongly Agree

The 56 questions pertain to different Guṇas as follows

Total number of items belonging to Sattva are 15, Total number of items belonging to Rajas are
19 and Total number of items belonging to Tamas are 22

Items pertaining to Sattva Guṇa are : 1, 3, 4, 5, 10, 12, 13, 17, 25, 28, 34, 37, 38, 42, 56

Items pertaining to Rajasika Guṇa are : 8, 9, 16, 18, 20, 21, 22, 23, 26, 27, 30, 31, 39, 44, 46, 48, 49, 50, 51

Items pertaining to Tamasika Guṇa are : 2, 6, 7, 11, 14, 15, 19, 24, 29, 32, 33, 35, 36, 40, 41, 43, 45, 47, 52, 53, 54, 55

Summing all the responses for a Guṇa, and then this sum was divided by the total possible score for the Guṇa. This will give the Guṇa score in the form of a percentage. Then, to obtain a standardized score for a Guṇa, sum the three Guṇa percentage scores and divide it into the Guṇa percentage scores

Example: For the 15 Sattva items a respondent scores 60, or an average of 4.0. This converts to a Guṇa percentage score of 57.14% (60/105 or 4/7). For the 19 Rajas items a respondent scores 57, or an average of 3.0. This converts to a Guṇa percentage score of 42.86% (57/133 or 3/7). For the 22 Tamas items a respondent scores 55, or an average of 2.5. This converts to a Guṇa percentage score of 35.71% (55/154 or 2.5/7). The sum of the three Guṇa percentage scores is 57.14 + 42.86 + 35.71 = 135.71 The standardized Sattva score is 57.14/135.71 = 42.10% The standardized Rajas score is 42.86/135.71 = 31.58% The standardized Tamas score is 35.71/135.71 = 26.31% .

6.3 Data analysis

Data was analysed using IBM statistics SPSS 21 version.
Since the data was normally distributed, we have conducted parametric test One-way RMANOVA.

We have taken Pre assessment in the beginning of Yōga intervention (Pre study) and after two months from beginning (Mid Study) and at the end of Intervention (End study).

To prove the first hypothesis we have conducted RMANOVA (Repeated Measures of Analysis of Variance) to see the changes between Pre Study to Mid Study and Mid Study to End Study.

To prove the second hypothesis to check the correlation between Vedic Personality Inventory and Big five Personality Inventory, Parametric test - Karl Pearson Correlation test was used.