CHAPTER III
METHODOLOGY

This chapter describes the method adopted, population, participants, inclusion and exclusion criteria, procedure of data collection, tools and data analysis.

3.1 Method
The surveying approach under the descriptive method is adopted in the current investigation and information is gathered through administering the Rorschach Test. The use of the descriptive method becomes imperative, since the present study needs to assess the existing mental state, health status, attitudes, characteristic of the population, etc., of the sample under study.

3.2 Population:
As per record available in the Shri Shri Govindaji Temple Board, Utra Shanglen Sana Konung and Sanamahi Temple Board, there are altogether 1000 registered Maibis. Out of this, 350 are in the Shri Shri Govindaji Temple Board, 250 were in the Utra Shanglen Sana Konung
and 400 are in the Sanamahi Temple Board. It is also reported that there are many Maibis who are not registered under the said boards and that these unregistered Maibis are not fully permitted to officiate as priestesses in any rites and rituals. Thus, these 1000 registered Maibis form the population of the study and it has been treated the sampling frame.

3.3 Sampling Method

To start with samples of 120 Maibis are selected through the simple random sampling technique, using Cochran's sample size calculation as given below. The selection of the sample involves the following three steps:

First step: Evaluation of sampling frame, i.e., source list of the unit of the target population. Under this step, those units in the sampling frame of 1000 population who have fulfilled the inclusion criteria has been listed. Thus 300 units are recorded.

Second step: the names of the prospective 300 subjects are written on the piece of paper and put it in a container.

Third step: After mixing all the papers, picked up one by one till the required number of 120 respondents is reached.

Out of the 120 samples selected 14 samples are rejected, as they are not willing to co-operate with the researcher. Thus, 106 samples are involved in the study. The advantages of simple random sampling are: 1) All elements have equal chance of being included 2) Degree of sampling
error is low. 3) This can be used in conjunction with other methods in probability sampling. (Black and Dean, 1976; Fink and Jacquiline, 1995)

3.4 Sample Size Calculation: The sample is determined by using the Cochran’s sample size formula and correction formula

\[
\frac{(t)^2 \times (s)^2}{(d)^2} \times \frac{n^o}{(1 + n^o / \text{Population})} = n
\]

Assume that a researcher has set the alpha level a priori at .05, plans to use a seven point scale, has set the level of acceptable error at 3%, and has estimated the standard deviation of the scale as 1.167. Cochran’s sample size formula is presented here along with the explanations as to how these decisions were made.

\[
\frac{(t)^2 \times (s)^2}{(d)^2} \times \frac{(1.96)^2 (1.167)^2}{(7 \times 0.03)^2} = 118
\]

Where \(t = \text{value for selected alpha level of .025 in each tail} = 1.96\)

\(s = \text{estimate of standard deviation in the population} = 1.167\)

\(d = \text{acceptable margin of error for mean being estimated} = 0.21(\text{number of points on primary scale} \times \text{acceptable margin of error}; \text{points on primary scale} = 7; \text{acceptable margin of error} = .03\) Therefore, for a population of 1,679, the required sample size is 118.

Cochran’s (1977) correction formula should be used to calculate the final sample size. These calculations are as follows:
The sample size for the present study when population is equal to 1000

\[
\frac{n^0}{1 + \frac{n^0}{\text{Population}}} = \frac{106}{1 + \frac{118}{1000}}
\]

Where \( n^0 = \text{required return sample size according to Cochran's formula} = 118 \).

\( n = \text{required return sample size because sample} > 5\% \text{ of population.} \)

3.5 Inclusion and Exclusion Criteria:

**Inclusion Criteria:**

a) Maibis who are able to give consent.

b) Who has a mother guru or father guru?

c) Who are registered?

d) Age: 7 to 60 years and above.

e) Gender: Only females.

**Exclusion Criteria:** a) Maibis who are having history of significant head injury, mental retardation, neurological disorders and bed ridden.
3.6 Tools:

a) Self Prepared semi Structure Performa (APPENDIX – I)

Self-developed semi structure proforma for collecting the socio-demographic, socio-economic and the other relevant data relating to the Meitei Maibis is used. The information such as Age, Sex, Education, Marital Status, Place of Residence, Type of Family, Age at Marriage, Age at the time of Possession, Duration of Possession, Frequency of Possession, History of Substance Abuse in the Family, History of Mental Disorder in the Family, etc, are explored using this semi structure performa. Besides, interview is also conducted, wherever necessary.

b) Rorschach ink-blot test (APPENDIX – II)

The Rorschach has traditionally been considered a projective test consisting of a set of 10 bilaterally symmetrical inkblots. Subjects are asked to tell the examiner what the inkblots remind them of. The overall goal of the technique is to assess the structure of personality, with particular emphasis on how individuals construct their experience (cognitive structuring) and the meanings assigned to their perceptual experiences (Weiner, 1994). Despite attacks from both in and outside the field of psychology, the Rorschach remains one of the most extensively used and thoroughly researched techniques (Archer and Newsom, 2000; Camara, et al., 2000; Watkins, et al., 1995). The central assumption of the Rorschach is that stimuli from the environment are organized by a person’s specific needs, motives, and conflicts, and by certain perceptual
“sets.” This need for organization becomes more exaggerated, extensive, and conspicuous when subjects are confronted with ambiguous stimuli, such as inkblots. Thus, they must draw on their personal internal images, ideas, and relationships to create a response. This process requires that persons organize these perceptions as well as associate them with experiences and impressions. Once the responses have been made and recorded, they are scored according to three general categories: (a) the location, or the area of the inkblot on which they focused; (b) determinants, or specific properties of the blot they used in making their responses (color, shape, and so on); and (c) the content, or general class of objects to which the response belongs (human, architecture, anatomy, etc.).

According to Exner (1993) the first publication of Hermann Rorschach’s 10 inkblots was in 1921 as a monograph, Psychodiagnostik. Rorschach died at age 37, shortly after the publication of his major work, Psychodiagnostik. His work was continued to a limited extent by three of his colleagues—Emil Oberholzer, George Roeurer, and Walter Morgenthaler. By 1957, five Rorschach systems were in wide use, the most popular being those developed by Beck and Klopfer.

The logic behind the use of this test is that the Rorschach Ink-blot Test is a standardized instrument extensively used to study and understand the personality structure of an individual, that the scoring categories for the
responses can reveal various psychological strengths and weaknesses of the individual, that it helps the clinician to understand the personality characteristics of the client in a better manner, that it helps the clinician to plan treatment and management strategy for the suffering individual, and that it helps to arrive at a diagnostic formulation of the client. Beck (1937) adhered closely to Rorschach’s format for coding and scoring. He continually stressed the importance of establishing strong empirical relationships between Rorschach codes and outside criterion measures. This system is more objective and the interpretation is based on the person’s perceptual-cognitive abilities. According to Beck scoring system, the data is to be interpreted basing on the number of responses, determinants, content categories, popular responses, organizational value, present of pathognomic sign and the other significance of ratios.

**Reliability**

1. Parker (1983) analyzed 39 papers using 530 different statistical procedures published in the *Journal of Personality Assessment* between 1971 and 1980. He concluded that, overall, the Rorschach can be expected to have reliabilities in the low to middle .80s.

2. Test-retest reliability by Meyer and Archer (2001) found that the mean reliability was .66 (range from 0.46 to 0.84, $Mdn = 0.69$).

3. Excellent inter scorer reliabilities 0.82 - 0.97 for scoring categories

4. Test-retest 1 year interval (non-patient) - 0.26 to 0.92

5. Ratios and percentages show higher test-retest stability
Validity

1. Primary focus is to discriminate among different clinical populations. For example - schizophrenics show poor-quality responses

2. Hard to establish because of multiple scoring categories and formulas


4. Not effective at assisting with diagnosis except; schizophrenia, borderline, bipolar

5. May predict variables such as outcome from psychotherapy, detection of psychosis, dependent Behaviour

6. Response productivity confounds validity

Asset

β Ability to bypass conscious resistance.

β Potential wealth of information.

β It assesses a person’s underlying, unconscious structure of personality.

β The true meanings of the Rorschach responses are unknown; the subject cannot easily invent faked responses.

β The cards can be easily handled, and the total administration time (including inquiry) is typically 50 minutes (Ball, et al., 1994).
Limitation

- Questionable reliability and validity.
- Complex scoring systems.
- Time required for scoring and interpretation.
- Lack of standardized administration and scoring system.
- The Rorschach has often been considered to have limited use with children, particularly children under the age of 14 years (Klein, 1986).
- Excessive time required for training.
- Large number of variables can produce spurious random significance.

Description of the Rorschach Cards (Dwarka and Suresh, 2001)

Card No. 1 - General Plate
Card No. 2 - Female Sex Plate
Card No. 3 - Reality Orientation Plate
Card No. 4 - Male Authority Plate
Card No. 5 - Reality Orientation Plate
Card No. 6 - Male Sex Plate
Card No. 7 - Mother Plate
Card No. 8 - Reality Orientation Plate
Card No. 9 - Emotional Tolerance Plate
Card No. 10 - Organizational Capacity and Emotion Provoking Plate
The Administration: Rorschach administration is divided into the following steps (Dwarka and Suresh, 2001):

1) **Purpose of Testing:** Used for making diagnosis of difficult cases, identifying the areas of conflicts, finding out the strength and weaknesses of an individual, etc.

2) **Apparatus for the Testing:** Rorschach 10 cards, Mini plates, Plain paper, Pencil, Colour pencil, Pen, Location Chart. Rorschach response recording sheet and Stop Watch.

3) **Testing Place:** Rorschach test can be administered in a Hospital, Prison, Army Barrack, Office, Classroom, etc.

4) **Rapport Formation:** It refers to the ease and comfort with which the clinician and the client relate to each other. The task of the clinician is to give relaxed and comfortable atmosphere to the client by greeting and welcoming him nicely.

5) **Seating Arrangement:** a) Side by side seating arrangement (Exner, 1993) b) Client is seating turning his back towards the clinician (Beck, 1961), c) Face to face seating arrangement (Rapaport et al., 1968)

6) **Instruction:** You will be taking an interesting test of thinking and imagination ability. It requires more than an hour's time. This test would help me in understanding your problems, strong and weaknesses of your personality. It would help me to serve you better and overall management of the treatment plan. I shall be giving you one by one a series of 10 plates made of ink-blots. Some
of them are in black and white and some are in multi colours. On seeing the plate you are supposed to tell me everything what you see on the plate. People see all sorts of things on this inkblot. So tell me what you see, what it might be for you, what it looks like, what it resembles with. You are free to tell me anything as there is no right or wrong answer. Say whatever comes into your mind without considering whether it is right or wrong or embarrassing. If you have any question then you are free to ask me. And if everything is clear, then we can start the testing.

7) The Testing Procedure

a) Recording Time: The clinician records two types of time for each plate, the reaction time and the response time.

i) Reaction time: It is the time elapses between the presentation of the plate to the client and the client's first response.

ii) Response time: It is the total time taken by the client for each plate, i.e. time from the presentation of the plate to the last response on the same plate.

b) Free Association: The free association phase begins when the client starts following the instructions after the presentation of the first plate and ends when the client gives the last response. During this free association, the client should be encouraged regularly to tell whatever comes to his mind. But when the client
asks some clarification for any of his/her response the clinician should not give any clue of the answer.

**The Enquiry:** It is of two type, enquiry for location and enquiry for determinants (Dwarka and Suresh, 2001).

- **a) Enquiry for Location:** Here, the clinician should ask where you see the response in the pictures. So the clinician should tell the client to show him the exact area of a particular response by encircling on the inkblot. Then this specific area encircled by the client should be marked on the location chart by the clinician.

- **b) Enquiry for Determinants:** The next important enquiry about the response pertains to what determine the response. So after finding out the location of a particular response, the clinician may ask; “what makes you think that is resembles with ....?” or “What reminds you of....?” or “In what way does this look alike....?” The main emphasis is to find out whether it is the form or colour or shading that determines the response.

**The Scoring:** The scoring is done under the following main classes (Dwarka and Suresh, 2001):

1) **Location:** There are five location categories. They are Whole Response (W), Major Detail (D), Minor Detail (Dd), Space Responses (Ws, Ds and Dds) and Confabulation Responses (DW, DdW, DD, DDD)
2) Determinants: It is divided into four major categories. They are a) Form Response b) Colour Response c) Shading Response and d) Movement Response.

a) Form Response: Form Responses are the one which is determined by contour, boundaries, shape, look and description of the responses.
   i) Good Form Response (F+)
   ii) Poor Form Response (F-)
   iii) Undecided Form Response (F±)

b) Colour Response: Responses given are based on colour. It is considered as individual's outwardly expression of emotion.
   i) Pure Colour Response (C)
   ii) Colour Domineering Form Response (CF)
   iii) Form Domineering Colour Response (FC)

c) Shading Response: The shading responses are concerned and associated with the use of black and its various shades of the inkblots.
   i) **Vista Response**: It is determined by the variation in shading that gives a three dimensional effect.
      I) Pure Vista Response (V)
      II) Vista Domineering Form Response (VF)
      III) Form Domineering Vista Response (FV)
   ii) **Flat Gray Response**: It is determined by the blackness of the inkblot
(I) Pure Flat Gray Response (Y)
(II) Flat Gray Domineering Form Response (YF)
(III) Form Domineering Flat Gray Response (FY)

iii) **Texture Response**: It refers to the sense of touch, e.g. smoothness or hardness of a thing.

(I) Pure Texture Response (T)
(II) Texture Domineering Form Response (TF)
(III) Form Domineering Texture Response (FT)

d) **Movement Response**: Any kind of movement or activity related to human form of movement is considered as movement responses.

3) **Content Categories**: It is the specific character of the perception. It is what client reports that he or she sees on a particular inkblot plate. It is the scoring category used to distinguish and classify all the objects reported by the client into few specific categories.

4) **Popular Response**: A popular response is a response determined by the frequency of its occurrence in normal population. So a response which is given frequently on the same location by most of the members of the normal population is a popular response.

**The Pathognomic Sign**: It generally means capable of recognizing feelings and emotions. Some of these signs are observed in the Behaviour of the client while he is giving responses in the free association as well as
answering in the enquiry. These are known as observational pathognomic sign (Dwarka and Suresh, 2001).

i) Perplexity: It is the client’s Behaviour which is reflected through verbal confusion and lack of confidence about the response he /she has given. It is the index of deep rooted anxiety, lack of confidence and perceived inability to adapt the situation in a matured way.

ii) Response Impotency: It is an inability to give a good response. It is the index of the feeling of inferiority, inability to excel/compete with others.

iii) Automatic Phrases: It is a complex act performed unconsciously. It is related to self acting without consciousness, volition and personal awareness. Presence of automatic sigh may be a reaction to the hallucinatory images or they might be covert hallucinatory reflexes.

iv) Perseveration: It means repetition. It is of two types a) Perseveration of the response - repetition of the same response on the new or next inkblot plate as that of the previous plate and b) Perseveration of the location- Repetition of the given responses to the same location on the next plate. It indicates rigidity to adapt a new situation, narrowed interest, preoccupation and stereotype thinking.

v) Contamination: It is the fusion of otherwise independently two good responses into one which in turn deteriorates the quality of the response. It is usually associated with disturbances in thinking process and weak reality orientation.
vi) Confabulation: It means giving a response interpreting only a small part of the blot and engulfing the adjoining areas to complete the incomplete image. It is an indication of thinking disturbances.

vii) Position Response: Any response which is determined by its specific position in the inkblot plate is called a position response. It is an indication of accidental thinking. It is usually produced by psychotic patients.

viii) Self Reference: Any response given based upon him or her is known as self reference. It is an indication of the loss of ego boundaries.

ix) Mutilation: It may be defined as gross distortion of the configuration of the body of an animal or the body of a human being. Mutilation responses are the characteristic of marked inner anxiety and tension and feeling of impending disaster.

x) Inversion of Response Tempo: It may be described as the reversal of sequence of responses on one or more plates on which the client has given more than one response.

The Interpretation (Dwarka and Suresh, 2001):

i) **Summary Chart (APPENDIX – III):** It is the condensed form of the response sheet in which each and everything of the response sheet is included in the form of numerical values for quick interpretation.
ii) **Interpretation:** The Rorschach test is a standardized instrument to study and to understand the personality structure of an individual. There are various ways of describing personality characteristic. Here, brief accounts have been given as to what are the signs and indices on the Rorschach that can be given to some idea about the personality characteristics of an individual. These variables are intelligence, emotional Adult, interpersonal relationship, anxiousness, reality orientation, etc.

iii) **Significance Ratio:**

   a) Reaction time and response time: Reaction time and response time are generally variable from 15 to 30 seconds. If it is less than 15 second it is considered quick and if it is more than 30 seconds it is considered retarded.

   b) Card turning: Response given after frequent card turning is usually found in neurotic client.

   c) Rejection: Unable to give any response in a given plate is considered as card rejection.

   d) Colour shock and shading shock: Marked discomfort in dealing with shading and colour plate is considered as colour shock or shading shock.

   e) Popular response (P): It is a response determined by the frequency of its occurrence in normal population. An absolute value of five
popular responses is a must to interpret and to consider that the client's thinking is in group conformity.

f) Space response percentage (S %): Seeing a response in the white space is considered as space response. It is an indicator of suspiciousness and sexual perversion.

g) Affective ratio (Aff.R): Total number of responses of the last three plates divided by total number of responses of the first seven plates will give the affective ratio.

h) Experience balance (Exp.B): It is the ratio between total number of movement responses and the colour sum rating. If movement responses are more, the individual is intratensive and if colour sum is more, the individual is extratensive.

i) Experience actual (Exp.A): It is the summation of movement response and the colour sum rating.

j) Lamda (L): It is the ratio between pure form responses and non-pure form responses.

k) F+ percentage (F+ %): It is obtained by total number of F+ divided by total number of F+ and F- and then multiply by hundred.

l) Animal percentage (A%): It is obtained by dividing total number of animal content responses (Animal + Animal details) by the total number of responses, and then multiplied by one hundred.
Diagnostic Indices (Rakesh Kumar 2010):

The diagnosis involves thorough understanding of psychopathologies and their manifestations. Supervised training is required to arrive at a diagnosis through Rorschach test. The diagnostic indicators of the following psychiatric illness are given in Appendix –IV:

a) Organicity (Brain pathology
b) Psychosis
c) Schizophrenia
d) Paranoid schizophrenia
e) Mania
f) Depression
g) Neurosis
h) Obsessive compulsive disorder
i) Anxiety disorder
j) Hysteria
k) Epilepsy

S.J. Beck’s Norms Score (APPENDIX – V)

3.7 Procedure of Data Collection

To proceed with the study, necessary permission is sought from the higher authority of three different Boards, viz., Shri Shri Govindaji Temple Board, Utra Shanglen Sana Konung and Sanamahi Temple Board. They are thoroughly explained about the research programme that the research is
taken up mainly to explore the basic personality structure of the Meitei Maibis. After this, all the Maibis who visited the three divine places coming from various places routinely are convincingly explained about the nature and purpose of the study, interviewing procedure and the method for maintaining confidentiality. They are also informed that their identifications like name will not be appeared in any part of the study. They have the right to seek clarification and information about the aspect of the research work. They have the freedom to refuse answer to particular question and can withdraw the test at any point of time. They are further informed that the test may take one and half hours approximately and a minimal amount of tips are also given to each participant. Once the oral consent is obtained from each of the participant an in-depth interview is conducted using a self developed semi structure proforma for collecting the socio-demographic, socio-economic and other relevant data relating to the Meitei Maibis. Rorschach test is then administered to all the participants who had given oral consent. The process is continued till the reasonable number of sample is collected. All the ten cards of Rorschach are given one by one and the responses are noted down on a Rorschach record and analysis blank. The enquiry for the responses given by the respondents is done after completion of all the ten cards. With this the administration of Rorschach test is completed. The scoring and the interpretation of the data are done only at the researcher’s convenient time.
3.8 Data Analysis:

The data are sorted, coded and entered into the computer using SPSS Software 15 versions. Data are presented using charts and frequency tables. The statistical formulae like mean, standard deviation, frequencies, chi-square, student t-test and independent t-test are adopted as descriptive technique and a higher technique like multiple logistic regression models is also applied wherever found suitable and necessary. Chi-square is used to test for association between variables and level of significant, t-test is used for testing the significance of the difference between two mean values and logistic regression analysis is used to examine the influence of various factors on a dichotomous outcome by estimating the probability of the event's occurrence. The p-values less than 0.05 and 0.01 are treated as cut-off values of significant and highly significant, respectively in the study. Both ethnographic past and present tense are used in writing the Research report, wherever necessary.