## **CHAPTER-3**

# RESEARCH DESIGN AND METHODOLOGY

#### RESEARCH DESIGN AND METHODOLOGY

This chapter describes the research methodology adopted to study the various dimensions of the Role of Martial Arts in Women's Health in Chennai City, Tamil Nadu. Based on the literature reviewed, a framework was drawn considering the availability of data, the human resource available, economy and limitation in carrying out the study. The respondents were counselled and assured that the responses would be used purely for research purpose and would be kept confidential before the questionnaire was administered.

A pilot study was conducted as a pre-test by administering the questionnaire to fifty samples in order to ensure validity and accuracy of the questions. During the interview that followed the administering of the questionnaire, it was learnt that the samples needed a better clarity on open ended questions. The questionnaire was modified based on the responses given by the samples to ensure that the objective of the study was focused upon. The questionnaire was designed in such a way that the sample was motivated enough to participate in this study. The questionnaire began with questions on their personal profile like age, community, family, qualification etc. to establish a rapport with the respondents and to involve them effectively in the study.

#### 3.1 STATEMENT OF THE PROBLEM

The aim of this research was to study the benefits gained by Martial Art Women practitioners. Women are prone to heart disease, diabetic and born fracture. The increased physical activity, help to prevent injury from normal day-to-day activities also reducing risk of diseases. Women are vulnerable to sexual abuse. Though most abusers are male, girl children and females should be taught self defence to defend themselves in violence. Keeping this in view the researcher personally believed that, practicing Martial Art will enhance the betterment of women's life in society, and lead to women empowerment.

The study proposed to help the policy makers in government, educationalist and parents to equip their girl children in self defence and physical activity. Many researchers have been attempted in the field of Martial Art but this research is the first and foremost study in the area of Health of women. Women face more violence and unhealthy condition in society, every woman should be provided with the opportunity to protect and maintain health to live longer.

#### 3.2 THE OBJECTIVES OF THE STUDY

The researcher had clear understanding of the information needed and analysed the following objectives for the study.

- To study the socio economic status of Martial Art Women Practitioners
- To assess the Self Defence gained by Martial Art Women Practitioners
- To assess the Self Control gained by Martial Art Women Practitioners

- To analyse the dependency between the years of practice and Grade in Belt, family members practice Martial Art.
- To trace out the dependency between the years of practice and health benefits such as strong physique, decline in respiratory disease, proper blood circulation, strong muscles, strengthen nervous system of Martial Art Women Practitioners.
- To trace out the relationship between Self-Defence, Self-Control and Health of Martial Art Women Practitioners.
- To find out the relationship between health dimensions such as Physical, Mental and Social Well-being of Martial Art Women Practitioners.

### 3.3 HYPOTHESES

- There would be an association between the family members practice Martial Art and the Grade in Belt honoured by the respondents.
- There would be an association between the Type of Family and considering Martial Art as Self-Defence oriented.
- 3. Improvement of Strong Physique of Martial Art Women Practitioners depends on the increase in years of Martial Art practice.
- 4. There would be relationship between the years of Martial Art practice and reduction in chronic respiratory disease of Martial Art Women Practitioners.
- 5. Proper blood circulation to the body depends on the years of practice of Martial Art.

- 6. Strengthening the muscles of Martial Art women practitioners, depend on the years of practice of Martial Art.
- 7. There would be an association between the years of Martial Art practice and strengthening the Nervous System of Martial Art women practitioners.
- 8. It was hypothesized that there would be significant relationship between Self Defence, Self Control and Health of Martial Art Women Practitioners.
- It was hypothesized that there would be any significant relationship between the health dimensions such as Physical, Mental and Social Well-being of Martial Art Women Practitioners.
- There would be significant difference between the factors such as Self- Defence,
   Self-Control and Health of Martial Art Women Practitioners.
- There would be significant difference the Health dimensions such as Physical,
   Mental and Social Well-being of Martial Art Women Practitioners.

#### 3.4 RESEARCH DESIGN

The study was observed to give a logical explanation or interpretation. The descriptive research technique through survey was adopted in this study. The researcher uses the questionnaire to obtain information by asking participants to respond to questions. The questionnaire strives to secure information about present practices, conditions, and demographic data. The objective of the questionnaire is that the results consist simply of what people say or believe.

#### 3.5 AREA OF STUDY

The study was organized among the women who practice Martial Art in Chennai City Colleges. Chennai is the prime city in India and capital of Tamil Nadu. Chennai formerly known as Madras is the capital of Tamil Nadu.

The study was carried out in Chennai colleges due to the proximity and availability of the targeted respondents. In Chennai, 74 Arts and Science colleges and 63 Engineering colleges are functioning. Among them three (3) women colleges and one (1) Engineering college were selected to collect the samples due to availability of samples. 200 samples were selected for this research study. The universe of this study is Martial Art Women Practitioner at the age group range from 17 – 22 years.

#### 3.6 SAMPLING PROCEDURES

The sample is the group of participants, their treatments, and situations on which the study is conducted. Prior permission was provided from the concerned authority to carry out the study. The mode of observation employed was field research. The sampling method used was cluster sampling where an ultimate sampling unit in the population was a cluster of many, a simple random sampling was used and cross-sectional technique were also used in this research in which samples of participant from different age groups are selected in order to assess the research study. Social artefacts such as books, website information etc., were used as unit of analysis.

The population for this study was from female under graduate and post graduate students in Chennai Colleges. The total size of population was 200 and samples drawn from each college differ according to the availability of samples. i.e.,

20 samples from Community College, 80 samples from Women Christian College, 76 samples from Stella Mary's College and 24 samples from IIT Madras.

#### 3.7 METHOD OF DATA COLLECTION

Data was collected from both primary and secondary sources. The primary data was collected from the respondents who were selected as samples through questionnaire method. The secondary source included published materials such as books, documents, journals, research reports / registers and websites related to Martial Art. A formal permission was obtained from the Head of the sports department in the colleges and also to Sensai's / Assan's of the Martial Art schools (Karate, Kobudo, Judo, and Silambam) to collect the primary data. 200 samples were selected for the research study. The colleges chosen were

- Community College
- IIT Madras
- Stella Mary's College
- Women's Christian College

The primary data was collected by using structured questionnaire method, and it was an instrument for collecting data pertaining to the study. The questionnaire was focused upon the objective of the study. The questionnaire was designed in such a way that the sample was motivated enough to participate in this study. The questionnaire began with questions on their personal profile like age, community,

family, qualification etc. to establish a rapport with the respondents and to involve them effectively in the study.

The Questionnaire consists of the following seven sections:

**Section 1**: Includes socio economic and demographic information

**Section 2:** Motivation to join in Martial Art and support of family, peer and college

**Section 3**: Assessment of self-defence mechanism

**Section 4:** Assessment of acquired quality of self control

**Section 5**: Focuses on physical health gained

**Section 6**: Deals with the mental health gained

**Section 7:** Deals with social well-being of the respondents.

A set of questions were framed for the purpose of investigating the subjects and their response were recorded towards protection and health of women, recommendations were made to government on the importance of Martial Art to women. A comprehensive questionnaire was designed to form sequence of questions simply to enable the respondents to understand and answer easily. The researcher has developed a suitable interview schedules for data collection after an extensive review of literature, internet search and discussion with experts. At the beginning of the interview the respondents were assured that all the information would be kept confidential and only used for research purpose.

#### 3.8 DATA ANALYSIS

The data collected were comprised and programmed to get logically consistent inferences. The data was coded, verified, (SPSS PC+) package were tabulated and analysed. Descriptive and inferential statistical techniques like simple frequency, Percentage, Graphs, Correlation, Chi-Square independence attributes, Anova and scheffe's post hoc tests were used for Data Analysis. Data collected was processed using statistical package for social sciences (SPSS PC+). The statistical techniques were applied and data was presented in textual, tabular and diagrammatic form.

#### 3.9 SIGNIFICANCE OF THE STUDY

Women's Health related with Martial Art is a new outlook. In a complex society women are more vulnerable to ill health and face harassment around the world. This study focuses on health of Martial Art women practitioners; the physical exercise promotes health and prolongs life, thus women need to be trained in order to lead a healthy life.

This study focuses on mental health, Martial Art releases stress, removes laziness and equip them with skills. Thus it empower women as active member of society. This study focuses on the development of personality, Martial Art training moulds and shapes the individual. Thus it teaches self control and makes an individual as an expected member of society. Women can improve the quality of life by learning self-control. In this context, this research focuses to study the importance of Martial Arts

to women's health and their empowerment. This research will analyse the ways to find, the self defence mechanism, help to improve health and safety of women in society.

#### 3.10 LIMITATION OF THE STUDY

Research concerned with women practicing Martial Art is necessary in complex society. Women were far removed from the rights that men enjoyed. In modern trend of social change and equal opportunities women are making more inroads in to the Martial Art, and are winning medals in the world championship. Fear or anger can often be a woman's motivating force in looking to the Martial Art for self defence training. Women become proud of their personality and try to keep their body fit.

Obtaining qualitative and quantitative data is the backbone of the study, and proper measures were adopted for a systematic data collection. In this study close rapport was built with the students over a period of time among their busy schedule. During the interview the respondents were motivated to understand the importance of Martial Art. The respondents recognized the benefits of Martial Arts and were curious to answer the questions. The number of samples may not be correct representation of the population, but still the study would be useful.

#### 3.11 LAYOUT OF THE STUDY

The study is presented in five chapters in the following sequences,

**Chapter One, the Introduction**, deals with health and its definition, women's role in family and society.

**Chapter Two, Review of Literature**, gives the relevant study pertinent to Self-defence, Self-control, and Health benefits by Martial Arts at global as well as Indian prospective, written by both foreign and national authors.

Chapter Three, Research Methodology, explains the methodology conceived and adopted to carry out the study, which includes Objective, Hypotheses and reasons for selection of the topic, Limitation and layout of the study.

Chapter Four, Data Analysis and Interpretation, analyzes and the role of Martial Arts in women's health survey, to interpret the results into different components of the objectives.

Chapter Five, Summary and Conclusion, deals with the summary of the finding and conclusion of the study, suggestions and recommendations derived, based on the findings of the study, the importance of Martial Arts for women in future research.