CHAPTER 5

RESEARCH METHODOLOGY

The present study used mainly a qualitative research design with a smaller additional component of quantitative research.

The task entailed closely looking at the ancient Sanskrit treatise, the Patanjali Yoga Sutras as covering the subject matter of pain and suffering, and interpreting it in the context of evidence-based modern medical neuroscience. For this task the qualitative research method of hermeneutics was used.

Hermeneutics is defined as the theory and philosophy of interpretation of meaning. Hermeneutics is mainly concerned with the meaning of a text or analogue of a text in order to enhance understanding. The interpretation aims to bring to light the meaning or underlying coherence through current knowledge to make it relevant and insightful.

The method of hermeneutics is derived from continental European philosophy particularly well established in the German traditions. This comprises of the following process:

1) The task of interpretation of meaning (erklären)
2) Understanding the context (verstehen) of the original treatise
3) Considering the treatise as a whole and its component parts (gestalt)
4) Looking at the meaning through linguistic usage (usus loquendi)
5) “Feeling one’s way in” psychologically (einfühlung)
6) Focus on better understanding of the life-world (lebenswelt)
7) Phenomenological understanding of the essential nature of the human being (dasein).

These form the key elements and methods of hermeneutics.

The hermeneutic process involved two components:
The principles that guide the hermeneutic phenomenology were applied. This is a dynamic process and involved the interplay between six activities of research:

1) A constant commitment to the yoga process and principles as expounded in the Yoga Sutras of Patanjali
2) Oriented stand toward the possibility of interpretation of the Yoga Sutras of Patanjali in the light of Medical Neuroscience
3) Investigating the process of yoga as a lived experience by a daily practice of yoga and applying the principles as much as possible in daily life as per the Patanjali Yoga Sutras
4) Expressing the lived experience and study of the Yoga Sutras of Patanjali through this writing
5) Clarification and re-clarification through repetitions in writing of certain aspects of the Yoga Sutras
6) Consideration of parts and the whole of phenomena through qualitative analysis of the entire discourse of the Patanjali Yoga Sutras as a whole and also the analysing the partial organization into the four chapters as already present in the original text.

The method of hermeneutic circle was applied during the process. This consisted of the following stages:

(1) Study of the original text of the Yoga Sutras of Patanjali in the Sanskrit language and also studying the translations into English by authoritative translators
(2) Reflection upon the sutras and correlating with the evidence-based knowledge of medical neuroscience
(3) Interpretation and re-interpretation in the tradition of modern scientific reporting.
As the work of Patanjali Yoga Sutras itself is in Sanskrit, this study uses English translations and translations of commentaries of the Patanjali Yoga Sutras by venerated ancient scholars and English translations and commentaries by eminent scholars. The works used are listed and described in Part 1 of the Review of Literature. Authoritative and widely available Sanskrit dictionaries have been referred to for the translation of Sanskrit words.

Maintaining the paradigm and principles of hermeneutics, the study has attempted to select and use the most relevant research and evidence-base from the scientific literature of medical neuroscience to interpret the text of the Patanjali Yoga Sutras in that light. As much as far as possible the author has tried his best to put into practice the ethics of the Yoga Sutras itself as expressed in the ashtanga yoga of Patanjali which include yama or ethical principles, niyama or disciplines, asana or physical culture, pranayama or breath regulation, pratyahara or discipline of the senses, dharana or concentration, dhyana or meditation practice and samadhi or absorption.

The scientific evidence has been selected from several reliable medical databases. Key word searching was particularly conducted through Google Scholar, Pubmed - the National Institute of Health, U.S.A, National Center for Bioscience Information (NCBI) and research sharing portals of ResearchGate and Academia.

Consultation of other relevant and reliable sources of materials was done. Consultations and discussions with individuals with traditional knowledge and practice of the Vedic tradition in general and Yoga Shastra in particular who were easily accessible as part of the family and community circles of the veda yoga shastra parampara, as necessary for clarifications was done.

The hermeneutic interpretations of the yoga sutras of Patanjali follow the basic sutras of the Patanjali yoga sutra body of work itself. Reference has been made to the Vyasa Bhashya, the commentary by Sri Veda Vyasa, the most
authoritative ancient commentary work in Sanskrit available on the Yoga Sutras of Patanjali.

The following Sanskrit dictionaries have been consulted:

1) Sanskrit Dictionary for Spoken Sanskrit: spokensanskrit.de
2) Sanskrit Dictionary: sanskritdictionary.com
3) Sanskrita Kosha Samuchhayaha: andhrabharati.com/dictionary/Sanskrit
4) The Practical Sanskrit-English Dictionary of Vaman Shivaram Apte
5) Monier Williams Sanskrit-English Dictionary

The qualitative data generated in the form of the text of the hermeneutically interpreted Patanjali Yoga Sutras was analysed using a qualitative data analysis software, QDA Miner, developed by Provalis Research, Montreal, Canada, which has been presented and discussed.

A small open label quantitative clinical study was conducted derived from the ashtanga yoga, which forms the core component of the practice of Patanjali Yoga Sutras. A practical mind-body medicine intervention derived from ashtanga yoga developed by the researcher called PRAYOGA was used in a clinical population to study subjective distress in twenty patients suffering from chronic pain conditions. The quantitative data generated was analysed using SPSS statistical software, developed by IBM, USA, which has been presented and discussed.