CHAPTER 4
AIM AND OBJECTIVES OF THE STUDY

4.1 AIM
Current study is aimed at exploring possibilities of measuring the atmosphere invoked by a group practicing specific yoga technique synchronized with one another, performing Agnihotra and yajña together and participating in a special festival using a Random Event Generator (REG).

4.2 RESEARCH QUESTIONS
4.2.1 Whether a group of healthy volunteers can influence their surroundings.
4.2.2 Whether a group performing Cyclic Meditation well synchronized with one another can change the surrounding consciousness field.
4.2.3 Can a group participating in Maitrī Milan sessions (Friendship meet) bring about a change in the surrounding.
4.2.4 Can an Agnihotra performed by an expert involving a group of persons change the surrounding consciousness field.
4.2.5 Can Apthoryasma Yajña performed by a involving a group of persons witnessing the same, change the surrounding consciousness field.
4.2.6 Can Navarātri festival performed by involving a group of persons witnessing the same, change the surrounding consciousness field.
4.2.7 whether it is possible to quantify these changes, if any.

4.3 OBJECTIVES
To study the group effect of following on REG
- Yoga Relaxation Technique, DRT (Deep Relaxation Technique), in a group of normal volunteers.
- Cyclic meditation performed by a group of normal volunteers on REG.
- Maitri Milan (friendship meet) on surrounding as measured by REG.
- Agnihotra influence the consciousness field as measured by REG
- Athoryama yajña on the surrounding consciousness field as measured by REG.
- Navarātri festival on consciousness field as measured by REG.

4.4 NULL HYPOTHESIS
1. Yoga Relaxation Technique DRT has no significant effect on psychokinetic power of normal volunteers as measured by REG.
2. Cyclic Meditation and Maitri Milan will not influence REG.
3. Agnihotra and Athoryama Yajña cannot influence REG.
4. Navarātri festival days have no effect on surrounding consciousness field as measured by REG.

4.5 RATIONALE

There are many global events where REG has shown significant effect. Here we want to see the changes in consciousness field through groups involved in yogic practices. Yajñas and festivals.
CHAPTER 5
METHODODOLOGY

5.1 SUBJECTS

- 91 healthy volunteers (39 experimental & 52 control) who came for attending residential yoga instructor course (YIC) in Swami Vivekananda Yoga Anusandhana Samsthan, Bangalore. Who gave their informed consent was selected for the study. Their age range was 18 to 50 years

- Cyclic Meditation program was held in Swami Vivekananda Yoga Anusandhana Samsthan, Bangalore. 40 healthy volunteers attended this program. Their age ranged between 24 to 45 yrs. The training was 15 days before assessment.

- The Maitri Milan is a combination of chanting of Bhagawat gita followed by spiritual discourse. This session runs every day in Swami Vivekananda Yoga Anusandhana Samsthan, Bangalore. About 200 ± 20 people, between age of 17 to 60yrs, attended. This data was taken from 1st May 08 to 30th May 08.

- The Agnihotra was performed on 20 October 2008 at Swami Vivekananda Yoga Anusandhana Samsthan during the international conference on “yoga, cow rural reconstruction”, Bangalore. About 300 ±30 people between the ages of 20 and 70 attended

- The Apthoryama yajña was performed at Poorna Prajñā Vidyā Pitha, Bangalore. About 300 ±30 people between the ages of 15 and 70 yrs attended the program.
The Navarātri puja was performed at Swami Vivekananda Yoga Anusandhana Samsthan, Bangalore. About 200 ± 20 people, between the ages of 15 and 70 yrs, attended.

We may assume that their presence also contributed to the ‘consciousness field’ in all programs.

5.2 DESIGN

5.2.1 Deep Relaxation Technique (DRT): The effect of DRT compared with random thinking (RT) was studied in 91 healthy volunteers evoking the capacity to influence the REG. Each session consisted of 3 trials of ‘pre’ followed by 10 trials ‘during’ and 3 trials ‘post’. The experiment was repeated on 1st day and 15th day.

**DAY 1: Random thinking group (RTG)**

<table>
<thead>
<tr>
<th>Session</th>
<th>Trails</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>3</td>
<td>5 Min</td>
</tr>
<tr>
<td>Post</td>
<td>3</td>
<td>5 Min</td>
</tr>
</tbody>
</table>

**DAY 15: Random thinking group (RTG)**

<table>
<thead>
<tr>
<th>Session</th>
<th>Trails</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>3</td>
<td>5 Min</td>
</tr>
<tr>
<td>Post</td>
<td>3</td>
<td>5 Min</td>
</tr>
</tbody>
</table>

**DAY 1: Deep Relaxation Technique (DRT)**

<table>
<thead>
<tr>
<th>Session</th>
<th>Trails</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td>3</td>
<td>5 Min</td>
</tr>
<tr>
<td>Post</td>
<td>3</td>
<td>5 Min</td>
</tr>
</tbody>
</table>
DAY 15: Deep Relaxation Technique (DRT)

<table>
<thead>
<tr>
<th>DRT (n=39)</th>
<th>16.4 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre, 3 trails</td>
<td>5 Min</td>
</tr>
<tr>
<td>10 trails</td>
<td></td>
</tr>
<tr>
<td>Post, 3 trails</td>
<td>5 Min</td>
</tr>
</tbody>
</table>

5.2.2 Cyclic Meditaiton (CM): The protocol to measure the effect of Cyclic Meditation on the REG was as follows: pre baseline measurements were taken before Cyclic Meditation similar measurements were taken during Cyclic Meditation; post measurements were taken after completion of Cyclic Meditation. Pre and Post measurements were taken for 05 minutes and during the session measurement were taken for 21.10 minutes.

<table>
<thead>
<tr>
<th>21.10 minutes of CM</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 minutes</td>
</tr>
</tbody>
</table>

5.2.3 Maitri Milan: The protocol to measure the effect of Maitri Milan session on consciousness field was as follows: measurements were taken on during the session of Maitri Milan. The duration of the session was about 45 minutes and data were taken all 30 days

<table>
<thead>
<tr>
<th>30 days &amp; 45 minutes daily</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 min. Pre, daily</td>
</tr>
</tbody>
</table>

5.2.4 Agnihotra: The protocol to measure the effect of Agnihotra mantra on the REG was as follows: pre baseline measurements were taken on before Agnihotra mantra in location; similar measurements were taken during Agnihotra; post measurements were taken after completion of Agnihotra.
Whole process 10 minutes including chanting, meditation and Agnihotra offerings with mantra.

5.2.5 **Apthoryama Yajña:** The protocol to measure the effect of the *Apthoryama Yajña* on the REG was as follows: pre-*Yajña* baseline measurements were taken on day 1 in the *Yajña* location; similar measurements were taken on days 2 to 11 (during *Yajña*); post-*Yajña* base-line measurements were taken on day 12. On days 2 to day 11, different *Yajña* activities took place. All *Yajña* days was compared with day 1.

| During 2 to 11 days | Pre | 2…3…4…5…6…7…8…9…10…11 days | post |

5.2.6 **Navarātri:** The protocol to measure the effect of the *Navarātri* on the REG was as follows: pre- data baseline measurements were taken on day 1 in the *Navarātri* location; similar measurements were taken on during the *Navarātri* days (9 days); post- data base-line measurements were taken on day 11. During those days different Devi Puja took place. All days compared with day 1.
5.3 INTERVENTION

5.3.1 Deep Relaxation Technique

The following yogic relaxation technique developed by Swami Vivekananda Yoga Anusandhana Samsthana-Deep Relaxation Technique (DRT), which can bring deeper relaxation at physical level and which, in turn, can bring about deeper relaxation at mental level, has been chosen as an intervention in this study. Deep Relaxation Technique emphasizes on part-by-part relaxation of the whole body. It works at all levels, i.e., physical, mental, emotional, intellectual, and spiritual levels. In this relaxation technique one relaxes the body part-by-part by directing the attention of the mind on different parts of the body, starting from the toes and ending with the head. A feeling of relaxation is propagated. The subjects were taking the practicing intervention three times per day. (see appendix 1.1 for full details)
5.3.2 Cyclic Meditation

The entire group was trained to perform the CM regularly for 25 days before the experiment was conducted. There were theory sessions to explain the dimensions of CM one hour per day for the first 10 days consisting of the following topics: Introduction to CM; Concept of stress according to modern medical science and according to Yoga; Recognitions half solution; stress release by CM; Concept of growth 1- Depth of perception; Concept of growth 2- Expansion of awareness; Group Dynamics; All pervasive awareness and CM; Research finding on CM; VYASA Movement. Each day there was a practice session after the theory for about 30 minutes during which corrections of practices were done. After ten days the participants practiced the CM for the next 15 days listening to a pre recorded audio tape of 22.5 minutes. Their practices were checked regularly by the trainers for its best effectiveness. Emphasis was made to synchronize their movements meticulously in time with the instructions. Every day the participants interacted with the trainer about their experiences and were given guidance for further growth. (see appendix 1.2 for full details)

5.3.3 Maitri Milan

Maitri Milan was a combination of chanting of Bhagavad gīta and spiritual discourse. Chanting for 10 minutes followed by spiritual discourse for 30 minutes ending with 5 minutes meditation and shanty mantra. All discourses
were related with Rajyoga, Bhaktiyoga, Jnanayoga and Karmayoga. This is time where everyone sit and chanting the bhagwat gita together.

5.3.4 Agnihotra

The following mantras were chanted once, and the whole process (includes preparation, chanting and meditation) took about 10 minutes.

First, take a small piece of the cow dung cake and place it at the bottom of the pot. Now put Gugul, Camphor or a Cotton Wick duly soaked in cow's ghee on the bottom piece and then start arranging the other pieces of cow dung cakes around it neatly. Use a matchstick to light the fire. If necessary, use the fan so that all the pieces are fully ablaze. Take two pinchfuls of clean, unbroken rice grains (raw) on your left palm or in a small dish. Smear these rice grains with a few drops of cow's pure ghee. Divide the ghee smeared rice grains in two parts. Exactly at sunset time, accompanied by the chanting of sunset Agnihotra mantras - 'Agnaye Svaha' offer the first part after saying 'Svaha' and complete the mantra by saying 'Agnaye Idam Na Mama'. Similarly, uttering the second line of the mantra offer other part of the rice grains to the fire after saying 'Prajapataye Svaha' and complete the mantra uttering 'Prajapataye Idam Na Mama'. Concentrate on the fire till the offerings are fully burnt. This concludes the evening Agnihotra.
Sunset:

ॐ अग्निये स्वाहा अग्निये इदं न मम
ॐ प्रजापतये स्वाहा प्रजापतये इदं न मम

Om agnaye svāhā agneya idāṁ na mama
Om prajāpateya svāhā prajāpateye idāṁ na mama
(Our salutations to the Fire and the Creator; these offerings belong to them and not to me)

5.3.5 Apthoryama Yajña

The intervention was consisted of the 10 day *Apthoryama Yajña*, the last of the seven Soma *Yajña*. In Soma *Yajña* the juice of the Soma plant is the main sacrificial offering. The *Apthoryama Yajña* has another important component, namely, construction of the Mahāgni Cayana or Garuda Cayana, the main Fire Altar (Havana Vedi), consisting of one thousand baked-clay bricks of different shapes and dimensions. Each of its five layers contains two hundred bricks, and takes a day to construct. The completed altar is shaped like an eagle with outstretched wings. Many rituals and chanting of *Vedic* mantras accompany the construction of the altar. The Soma offering was made on the tenth day. (see appendix 1.3 for full details)

5.3.6 Navarātri Festival

The intervention was consisted of the 9 days of *Navarātri puja*. The intervention consists in the form of different types of *Bhajans, Satsangs, Yajñas* and different rituals. In Navarātri Puja the *Asthami* (eighth day) is the main
sacrificial offering. Many rituals and chanting of *Vedic* mantras accompany the *Homa, Bhajanas* and spiritual discourses regarding *Navarātri Puja*. The Yajña & Homa offering is made on the eighth day.

**Significance of Navarātri Puja**

Navarātri is the nine day period of worship before the festival of *Dassera*. Navarātri is a combination of two words. 'Nava' means nine while 'ratri' means night. Therefore, this celebration is literally translated as 'nine nights'. The celebrations begin on the first day of the month of Ashvin according to the Hindu calendar. They culminate in the festival of *Dassera*, on the tenth day of the month. As per the Gregorian calendar, Navarātri always falls in the month of October. The exact date differs from year to year though. (see appendix 1.4 for full details)

**5.3 ASSESSMENTS**

we were inspired to take the experiment into the field, running a modified version of the continuous software called FieldREG. The name was a double entendre, since the purpose of the experiment was to monitor something that might be regarded as a consciousness field. The Field REG experiment did not have an intention, and indeed could be used to gather data in situations with little or no direct interest or attention from people. We looked for situations that
might produce a "group consciousness" because people would be engaged in a common focus, resulting in a kind of coherence or resonance of thoughts and emotions. For contrast, we identified other, mundane situations we predicted would not bring people to a shared focus. The study was conducted in a natural setting at Bangalore. Experiments were conducted at the site during specific events. REG readings were taken experiments before, during and after each specific event, every day as per design protocols presented in chapter 4.