

What is life. The book is said to have been a valuable precursor to the birth of molecular biology itself which later led to the discovery of DNA. Readers are particularly referred to Chapter 6 ‘Order, disorder and entropy’. From considerations of entropy for inanimate and animate matter, Jayant Udgaonkar (32) has stated categorically that “nothing can escape the long arm of the second law of thermodynamics”. We are therefore led to conclude that of the three parameters measured, results of Integral entropy deserve critical evaluation, since this may be a precursor to other manifestations in area and fractality. Thus, entropy could be considered as subtlest variable that is affected in any experimental condition.

The control group carried out relaxation practice for one minute followed by recitation of Gayatri mantra twenty times. The experimental group practices nyasa for the same length of time followed by Gayatri recitation for 20 times. It may be noted that between relaxation and nyasa, the former is easier to perform. Nyasa has to be learnt and practiced for some time for the learning to take effect, say a month before it becomes as easy and spontaneous as relaxation. In spite of this condition, nyasa has shown marginally better outcome.

The results are recast as shown below.

<i>Entropy decreases due to nyasa only</i>	<i>13</i>	
<i>Entropy decreases due to relaxation only</i>	<i>10</i>	
<i>Entropy decrease due to nyasa and relaxation</i>		<i>23</i>
<i>Entropy increases due to nyasa and relaxation</i>	<i>06</i>	

The above data shows a small advantage in favor of nyasa. This is encouraging since the results have been recorded in spite of a short time of nyasa practice. With regular practice for a month, the results could be better. We can conclude that nyasa is promising to be a method for decreased disorder resulting in possible better health.

8.0 APPRAISAL

This research on scientific study of the effect of nyasa is elementary. Many parameters considered for measurement in studies on living systems could all be candidates for study on effect of nyasa. However, a judicious choice should be exercised to select the most suitable. Out of the three taken for this study, entropy seems to be most subtle and also promising.

8.1 SUMMARY OF THE FINDINGS

Our findings based on exploring the sastra literature on nyasa and limited controlled experiments on the effect of nyasa indicate that the nyasa procedure will be useful for the twin purpose of bhutasuddhi and mantrasiddhi on one hand and can be an effective method to reduce entropy. The decrease in entropy is a signal of better health. Nyasa can therefore be applied in yoga therapy as reported by S. Bashyam, T. M. Srinivasan and H. R. Nagendra (33).

8.2 CONCLUSION

As stated earlier, this is the first scientific study on nyasa. The limitations as encountered and perceived are described below, as also suggestions for future study. Though nyasa for Gayatri mantra is simple, a greater familiarity with the practice of nyasa is needed for the learning curve to operate. At least a month of practice of nyasa is recommended.

It is surmised that relaxation itself is not easy to achieve and at times considered 'boring'. Subjects may relax better by a number of visuals of different cues and socio-cultural settings. Measuring Galvanic Skin Response (GSR) to monitor relaxation during practice could provide objectivity to the measurements.

In this study the chanting of the Gayatri mantra was left to the control of the individual. A better procedure could be to play an audio recording with the subjects mentally following the recitation. The recording needs to be done only once, which is reproduced to reduce variation in the quality of recitation and the time taken for recitation. The number of times Gayatri is recited may also be varied. The subjects could be heterogeneous from different subcultures. Basic condition that the subject should be practicing mantrajapa remains, as nyasa is coupled to mantrajapa. The age group of the subjects in this study was incidental. The study should include subjects of different age groups.

Future study promises to open vistas of greater understanding of the research topic of nyasa for specific application in yoga therapy for major health problems and promotion of positive health.

8.3 IMPLICATIONS OF THE STUDY

The study has implications both for those who are committed to follow the dictum of sastras and those who value scientific spirit in whatever they do in daily life. The former, instead of

following sastra mechanically will carry out their sastraic duties with understanding and sincerity. The latter will take to sastra wherever it has the scientific evidence to back the claims of sastra.

8.4 APPLICATIONS OF THE STUDY

The study has potential for applications in yoga therapy in treating many health problems.

Since nyasa is based on touch sense the procedure can be effectively applied to augment touch sense as for example in disorders related to peripheral neuropathies. The concept of nyasa will also enlarge one's ability to identify with macrocosmic universe as in vyahrti nyasa.

8.5 STRENGTHS OF THE STUDY

This study is the first of its kind combining the features of sastras with a scientific measurement of the benefits of nyasa. The source of subjects for such a study is difficult to get. In this instance, a gurukulam teaching sastras to young students was willing to offer the support. As far as scientific measurement was concerned, a new device capable of measuring subtle changes in the body was also readily available. Discussion with other research scholars working on similar subtle phenomena was also strength of this study.

8.6 LIMITATION OF THE STUDY

Applications of the results of the study should be considered from two angles. Those who are keen to follow the injunctions/instructions of the sastra, but would like to have evidence of the benefits, can volunteer as subjects of similar enlarged studies and learn from direct empirical evidence. Scientists who are open to find out what sastras has in store for mankind can also join the study as researchers. Thirdly people seeking alternative therapy either totally or as a complementary system can undertake a therapy based on nyasa when more data is available from future research. As stated earlier, this is the first study of its kind on nyasa. The limitations as encountered and perceived are listed below, as also suggestions for future study. Future study is promising to open vistas of greater understanding of ancient scriptures.

In the present study, we decided on the measuring device first and later, the parameters within the ambit of the device. Though it is a practical measure consciously followed, the

reversal of the order would be more appropriate. This calls for further insight in the subject. Also the empirical evidence of persons strictly following the canons of agama sastras (Saiva, Sakta and Vaishnava) may provide leads in this direction.

8.7 SUGGESTIONS FOR FUTURE STUDIES

Though nyasa for Gayatrimantra is simple, a greater familiarity with the practice of nyasa is needed for the learning curve to operate. At least a month of practice of nyasa is recommended.

It is surmised that relaxation itself is not easy to achieve and at times considered 'boring'.

Subjects may relax better by a number of visuals of different hues and socio-cultural settings.

Measuring Galvanic Skin Response (GSR) to monitor relaxation during practice could provide objectivity to the measurements.

In this study, the chanting of the Gayatrimantra was left to the individual's control. A better procedure could be to play an audio recording with the subjects mentally following the recitation. The recording could be from a neutral person. The recording needs to be done only once, which is reproduced to reduce variation in the quality of recitation and the time taken for recitation. The number of Gayatri can also be varied. The subjects could be heterogeneous from different subcultures. Basic condition that the subject should be practicing mantrajapa remains, as nyasa is coupled to mantra japa. The age group of the subjects in this study was incidental. The study should include subjects of different age groups.

The reasons for the choice of 12 nyasa points in Kesavadinyasa and whether regular practice of nyasa prior to mantrajapa will augment touch sense appear as two most important areas for research with potential for application in therapy.