## 8. APPRAISAL

### 8.1 SUMMARY OF THE FINDINGS

## Kāśyapa Prakṛti Inventory:

This study describes development and evaluation of a new questionnaire, designed to evaluate the natural state of dośas in adolescents. It focuses on the overall Physical and physiological aspects and it also links the stable aspects of personality to Āyurveda's tridośas properties of the physiology. Personality consists of modes of response to environmental demands or expectations that may be varied and might be typical too. This study focuses on the overall personality and the general feelings of an individual. The term personality as used here includes everything about individual and his complete behavior.

# Kāśyapa Psychophysiological State Inventory:

The whole point of this inventory is to assess the participant's current state of mind and interpret that state in terms of states of each dośas, on the assumption that those dośastates influence the mind and are reflected in the state of mind. But what the mind reflects is neither exactly Prakṛti nor Vikṛti. In order to assess the Prakṛti original state of tridośas in health, many questions are required at physical, physiological, and mental levels. Vikṛti is a different and a pathological concept. In this study, we attempt to assess the present 'state of each dośas', in a sense that is neither exactly its Prakṛti, nor its Vikṛti.

## Pre-Post Yoga study:

The main purpose of this study was to evaluate the use of the new KPI for adolescents. Though the objective was also to administer the inventory pre - post a Yoga program and assess any changes in the tridośas prakṛti. These changes would help the adolescents to bring in some lifestyle changes and inculcate the yogic practices which enhance their personality for their own betterment of health during their natural growing age and for the society. In the present modern times, we commonly see so much of changes in the eating habit and living and the dośas strength in the body is so opposite to their age and seasons during the growing age. Therefore, the results in this study have shown that with the steady practice of the yoga module designed here would help them to restore their desired dośas balance and specifically when vātadośas is reduced, increase in pitta dośas helps in their learning skills, memory, intelligence and active physically too which is expected out of these youth, added to this increase in kaphadośas helps in the

development of body, rajas and tamas in balance brings in patience and calmness to their well - being.

### 8.2 CONCLUSIONS

## Kāśyapa Prakṛti Inventory:

The new Kāśyapa Prakṛti Inventory assesses both physical and physiological traits. These may be considered to represent general feelings including overall balance of well-being. It does not focus on pathology. Data analysis found the inventory to be both consistent and reliable.

## Kāśyapa Psychophysiological State Inventory:

The Kāśyapa Psychophysiological State Inventory, KPSI, is designed to assess the state of the tridośas in adolescents. It has been shown to be a consistent and reliable instrument for identification of an individual's dośa imbalances, and changes in mood-state imbalances which are temporary.

## Pre-Post Yoga study:

The study suggests that the four-week IAYT Yoga module employed in the intervention brings significant balancing benefits for tridośas in adolescents. It may also benefit levels of the three Guṇas. When practiced regularly over a sufficient period of time, the breathing techniques like sectional breathing, Nadi-shuddhi, and Sitali, named in the yoga module helps to reduce Vāta at the physical level, and simultaneously overcome Tamas. Adopting dynamic practices like Suryanamaskara, Asanas & Kapalabhati, Pitta increases so that the individual him/herself transforms inertia (Tamas) into Rajas, thus bringing lightness and flexibility to the body and dynamism to brain activity (Rajas). In yogic lore, this is considered an advance on the path to transcending the influence of Guṇas. Along with these practices, addition of meditation, Japa, breath retention in Pranayama and increasing time of maintaining each Asana helps to increase stability of body and mind (Sattva).

### 8.3 IMPLICATIONS OF THE STUDY

## Kāśyapa Prakṛti Inventory:

This study helps in measuring the bodily and physiological assessments in adolescents in knowing their overall well-being with relevance to tridośa. Each dośa manifests specific characteristics in individual's psychophysiology. This study which, focus on assessing the trait

aspect, it's important to maintain one's health. The equilibrium of dośa is considered as health. Āyurveda texts mention seven types of Prakṛti with either single dośas, Vāta, Pitta, or Kapha, dominant, or their combinations, Vāta-Pitta, Vāta-Kapha, or Pitta-Kapha; rare are individuals with natural balance between all three, Samadośa. This inventory thus helps adolescents in knowing their nature of Prakṛti or vikṛti and gives light on striving towards bringing samadośa in oneself in taking responsibility in bringing changes in their lifestyle.

## Kāśyapa Psychophysiological State Inventory:

This inventory is suggestive of assessing the mood states at a given moment. Thus implying, to bring in changes within our mental states. Adolescents do face challenges, peer pressure etc every second and minute of the day, those issues have to be dealt, and the mood keeps going through enormous pressure and tends to waiver according to the situational demands. However, over a period of time, these mood-states become their second nature, though it is acquired one tends to forget their actual self. In that regard, this scale helps in checking the present state of mind in combating the moods and bring in some required beneficial changes and go towards the positive well-being instead of the secondary acquired nature become primary and thus leading to psychiatric or behavioral disorders.

## Pre-Post Yoga study:

Due to modern day lifestyle, eating and living habits, the natural state of dośas in the body is never seen, this leads to imbalance of the same and leads to various lifestyle disorders in their growing age or later part of life. Adolescent growing period is when the actual growth and personality blossom. So, a lot of care has to be taken in restoring the balanced dośas and also the guṇas. So, this yoga module designed for this purpose has shown significant results in inculcating yogic practices at a young age, so that they don't succumb to any kind of behavioral or societal pressures. The result of yoga module shown the Vātadośa being reduced and pitta & kaphadośa increased, thus helps in increased memory, intelligence, being calm, steady and patienceful, self-regulation, social interaction, in acquiring the required skills and an over-all personality growth is seen.

### 8.4 APPLICATIONS OF THE STUDY

## Kāśyapa Prakṛti Inventory:

This developed inventory helps to measure both physical and physiological traits. Helps adolescents to focus on over all development of their well-being. Strive to reach the state of

having balanced tridośas, so that their overall personality development is seen. They become consistent in achieving their life skills and lead a healthy, productive, calm and peaceful life as their longevity of life is increased through the Sama dośa (balanced tridośas) in them.

Kāśyapa Psychophysiological State Inventory:

The Questionnaire presented here is new and a unique approach to measure dośass, a physiological concept which has not been tried previously and is concerned with the adolescent age group. This inventory is very simple and thus infers the state of a person's physiological balance or imbalance from their self-perceived state of psychological imbalance. This when noticed can be treated with either medicines by psychiatrists or by a psycho - therapist through counselling. Hence its beneficial in coping the participants with their emotional instabilities and to come out of their shell and explore their abilities.

## Pre-Post Yoga study:

A specific Yoga module designed using KPI as an instrument to measure tridośas in adolescents showed significant results. This turned out to be very beneficiary for adolescents to bring in lifestyle changes and practice the yoga module in order to get the imbalanced dośass to balance and also benefit the levels of triguṇas. A pre-post intervention brings in overall personality changes at all the five kosha levels according to yogic lore and thus helps in bringing a positive approach towards life during their growing years with enhanced intelligence and improvised skills in learning and behavior.

### 8.5 STRENGTH OF THE STUDY

Kāśyapa Prakṛti Inventory:

The KPI is the first inventory to assess dośa Prakṛti in adolescents. Unlike, the KPSI, it identifies psychophysiological states that are simple to assess. Its results will indicate whether one or two dośass are dominant, or even more rarely, three are equally dominant and in balance. The KPI is thus suitable both for research and for clinical assessment. Regarding the latter, short-term fluctuations of patients' dośass can now be assessed. The cronbach's alphas for all three dośass were acceptable; the anticorrelations between pairs of dośass were in the ranges expected from previous studies.

Kāśyapa Psychophysiological State Inventory:

The KPSI is the first Āyurveda inventory to assess mood states, an attempt to identify rajas and tamas prādhānyata when we are talking of the psychological states. Its Cronbach's alpha values are good, above 0.7, indicating good internal consistency. Also, its ability to assess a person's dośa vikṛti can help a patient's physician to combat such states of imbalance. The KPSI should help diagnosis in adolescent patients suffering from physical or mental problems. A previous study by Shilpa and Murthy's related test has even been used to assess clinical anxiety. The inventory can also be used for research, e.g physicians and researchers can administer the inventory to assess the immediate effect of yoga or other interventions on a subject's state of mind.

Pre-Post Yoga study:

It is the first to assess the effect of Yoga on tridośas in adolescents; and being a pre-post design, the first to observe significant changes in state of all the three dośass, Vāta, Pitta and Kapha; The intervention can bring changes in tridośas large enough to significantly alter adolescents physical and psychophysiological states – and possibly reshape their personalities.

### 8.6 LIMITATIONS OF THE STUDY

Kāśyapa Prakṛti Inventory:

The weakness of the study is that test-retest reliability still needs to be evaluated. Also results will be more precisely known when more subjects have taken the test.

Kāśyapa Psychophysiological State Inventory:

The idea behind this research program lies in Svyasa's use of the Panchakoña model of disease generation, i.e that problems in the emotional body, the manomaya koña cause problems in the pranamaya koña, and then in the physical body or annamaya koña. While this seems a sufficient basis for administering Yoga therapy programs, it does not encompass every element of Āyurveda's shadkriyakāla, which therefore means that the inventory cannot be used for a full physiological assessment of a patient's dośa imbalances. Also, Test-Retest Reliability was not done, and no norms were set and should be done at the earliest opportunity.

Pre-Post Yoga study:

No control group was included in the study.

#### 8.7 SUGGESTIONS FOR FUTURE STUDY

Kāśyapa Prakṛti Inventory:

Clearly Test-Retest Reliability is an immediate topic for future research, as is further evaluation from larger groups of subjects. The limitations are resolvable. Norms for the scales to be set. More comprehensible variables can be thought of in the study.

## Kāśyapa Psychophysiological State Inventory:

Developing a scale specific to the adolescent age-group was because agitation, unsteadiness, etc. are seen in initial stages of adolescence onset. The inventory could also be used for young adults, but only after validating it on such an adult sample. The scale's usefulness to practicing Āyurveda physicians should also be tested. Its accuracy in diagnosing Prakṛti should be compared with other modes of assessment, notably NādiVigyana Yantra, which is used accurately and reliably by many of India's top experts in the field. Also, as stated above, the scale's test-retest reliability must be assessed. Criterion Validity on the other hand, suffers from the same weakness as for STAI: it is very difficult to establish for self-assessment tests of any kind, simply because those being assessed are asked questions about themselves. Finally, this research has the potential to be developed into a study of disease susceptibility and strategies of prevention in the age group concerned.

## Pre-Post Yoga study:

Any future study. A randomized controlled trial would then be the best study design, but with the following caveat: here, the same Yoga module was used for all the participants, despite their having different dośaPrakṛti. Future studies should use several Yoga modules, each adapted to a particular dośaPrakṛti. Then we may anticipate improved progress towards Sama Prakṛti being achieved in all cases.