

7.0 DISCUSSIONS

The Kāśyapa Prakṛti Inventory aims to assess the tridośas and Prakṛti in adolescents where as Kāśyapa Psychophysiological State Inventory assess the present ‘State of each Dośa’, in a sense that is neither exactly its Prakṛti nor its Vikṛti.

The strength of the study, it is the first attempt to develop a consistent, and self-reportive inventory, to measure tridośas and Prakṛti in adolescents, which according to Āyurveda is the most vital aspect to maintain one’s health and prevention of any kind of imbalances, one has to follow a regimen in accordance with the different types of dośas. e.g. a person with predominance of Vāta, should avoid spicy, bitter and astringent taste food, instead they should consume sweet, salty, sour taste food. With such, personality development methods one can refrain from physical and psychological vulnerability. Though they are many scales available to assess the Prakṛti, most of them have been standardized with the adult age groups and those questions wouldn’t be appropriate to ask adolescents. Hence, they require a different mode of questions. However, this study has documented the efficacy of integrated yoga module measuring tridośas. With this amongst tridośas Vāta decreased and pitta-kapha increased significantly This implies that sattva is increased while rajas and tamas decreased.

In recent times children and adolescents are challenged by huge number of pressures at school as well at home and amongst their friends / peer pressure. These are known to endanger in developing mood swings, lack of focus, sober or impulsive attitude to begin with and later leading to psychological and behavioral issues. Many of the earlier survey and studies (Telles, Butzer et.al) done with the pervasiveness of psychiatric disorders in adolescents, stress was considered to be one of the major pre-cursors for the alarming rate of increase of their condition. Psychologists state that, many of the psychiatric and psychological conditions in adults owe back to their symptoms arising either during childhood/onset of adolescence. So, there’s a great need in medical and alternate sciences to come up with health modules/ questionnaires which could help them in assessing during such initial phase so that they are protected by vulnerability of social and emotional pressures. So, in this regard, the Kāśyapa Psychophysiological State Inventory and Kāśyapa Prakṛti Inventory was developed from Āyurveda perspective where in imbalances in tridośas has an impact on the emotional (guṇas) status too. Āyurveda emphasizes on good diet, balanced mind, healthy regimen in day to day, life in order to be free from physical and psychological ailments. The present developed and standardized inventories Kāśyapa Prakṛti Inventory and Kāśyapa Psychophysiological State Inventory are self-reportive to

measure tridoṣas and Prakṛti in adolescents. These scales are supported with reliability and validity with Cronbach's alpha, values which are in the acceptable range above 0.5.

According to Āyurveda, tridoṣas and triguṇas are inborn and distinct features described in this science and tridoṣas become the integral part of the body where as triguṇas are integral part of the mind. Sattva, rajas and tamas are the triguṇas, whereas precisely, rajas and tamas are called as manasa doṣas. The very physical and mental characteristics in an individual state of being healthy or diseased is dependent on one or the other triguṇas. As described in the classics, Pancamahābhūtas form the foundation entity for the tridoṣas and triguṇas. In the humans either doṣas or the guṇas single or in dual combinations are dominant and expresses themselves. The whole of universe as well the human body cannot function without the pancamahābhūta's, tridoṣas and triguṇas, this is what is called as avinābhāvasambandha, as they are interrelated within and externally too. Tridoṣa and triguṇas are intricately related to each other as they are responsible for a unified personality composition at the physical and psychological level. This is very much seen in this study, and their variations too. The triguṇatmaka description of one's individuality (Prakṛti) of pancamahābhūta's is actually the applied aspects of understanding guṇas in metascience and medical science. According to Sushruta Samhita, mahābhūta's are constituted of triguṇas, and they are as Akasha is predominant of sattva, Vāyu with rajas, Agni with combination of sattva and rajas, Jala is with sattva & tamas, and lastly Prthvi with tamas guṇa.

Though Caraka says Vātadoṣa is a combination of Akasha and Vāyu and due to predominance of Vāyu, Vāta is made up of Rajas, Pitta doṣa with Agni and Jala, and due to increase of agni and less of jala, it has a proportion of Sattva and Rajas in it and Kaphadoṣa with Jala and Prthvi, so it is more with jala, it is made up of Tamas quality. So, a combination of tridoṣas, triguṇas and the panchabhūta's are very much interrelated and thus the bodily humors and mano doṣas afflict each other.

Thus, the triguṇas do provide a platform to understand personality from a different dimension, and human behavioral concept of seeing in that dimension is attempted in this study. Thus, a study by (Dhulla. T) in understanding the dynamics of triguṇas which are inherited can be changed due to physical, physiological and psychological and social afflictions and can influence the behavior of individuals and is determined by the personality for the response given at that time of situation. This is evident from the study attempted here with KPSI. So, individual's personality is determined by the tridoṣas and triguṇas which are though genetically

designed, Āyurveda emphasizes on specific ahara, vihara, vichara etc for specific Prakṛti in detail as these are the factors to influence tridoṣas and triguṇas in the body. As already stated, the physical doṣas Vāta, pitta and kapha produce disease pertaining to body first and then afflict the mind, likewise the mano doṣas rajas and tamas first produce mental disorders and then affect the body. Also, tridoṣas and triguṇas influence hand-in-hand at physical, emotional and at intellectual levels.

One of the cleansing- therapy, called svedana is the line of treatment when there is increase in Vātadoṣa, as its always represented with speed. A study has shown that sweating after yoga practice helps. This becomes the negative aspect of Vāta, which is very much associated with Rajas and Tamas. Some of the earlier studies have shown that the rajas and tamas decreasing after yoga intervention (KhemkaS et al) and the present study has shown that Vāta reduced post yoga practice.

Pitta is the characteristic of tāpa / heat. Whenever there is raise in temperature in the body, eventually pitta increases. Former study has discussed the effect of yoga on body temperature and thermoregulation (Agte V) With the yoga practice, the physiological aspects like being very active, enthusiasm and intelligence and memory increases, these being the positive attributes of pitta. This study has shown that pitta increased after yoga practice.

Kapha is predominant of jalamahābhūta and is associated with sattva and tamas guṇas. Earlier studies have shown that Kapha being correlated with sattva guṇa and it does increase after the yoga practice. The various research work done where kapha correlating with sattva is discussed and also kapha increasing after yoga in various thesis and studies. Energy consumption is seen in yoga practice and that yields in increase of kapha. Chanting, meditation, nadanusandhana practices too has helped in increasing of kapha after yoga practices in this study. Loosening exercises, dynamic exercise and asana practices done by adolescents helps in reducing rajas and tamas, as naturally pitta is increased during this practice. Energy which is stored in the mind in the form of thoughts is expanded through physical activity. The practices of pranayama help in curbing the speed of mind and reduction of thoughts, thus helps in focusing. Likewise, the modern psychology does define the state symptoms to be to be worry, tension, nervousness, where an individual feel at a given situation and at that moment is considered to be momentary. And while defining the trait aspects to be feeling of stress, discomfort on a day-to day basis and experiences, as how most of the people feel across typical situations is considered to be a general feeling. So, these kin of exhibited response can be measured by these developed scales in this study.

Further, the nature of Prakṛti can be defined in an individual as a tendency to react in a given situation. As the Prakṛti formed at the conception cannot be changed, but it certainly can be dealt in bringing the changes in our living and practices. Hence this study has dealt with the vikṛti producing aspects of Prakṛti. Vikṛti is the cause for any disease to occur and Prakṛti is the causative factor for that. The tridoṣas and triguṇas are interrelated and exhibit themselves with demands of day to day, life and this study is attempted in this context.

7.1 The KPI:

The Kāśyapa Prakṛti Inventory presented here is a scale designed to assess adolescent Doṣa Prakṛti, the underlying levels of each doṣa's original strength in their physiology. Its values represent respondents' general feelings, so it assesses overall physical and physiological strengths and is less concerned with pathology. The results have shown that the inventory is both consistent and reliable.

7.2 The KPSI:

Regarding the Kāśyapa Psychophysiological State Inventory all items describe emotional states or tendencies. These had been selected as associated psychological characteristics of Doṣa states in the physiology. This presents a unique, new approach to measuring the physiological concept of doṣas, which had not previously been attempted. Rather than being directly concerned with physiological states, the KPSI approach uses the fact that any Ayurvedic imbalance in the physiology tends to be associated with a related psychological imbalance on the mental plane. Thus, by assessing a person's state, the KPSI obtains indications of which doṣa have moved out of balance, as well an attempt to identify rajas and tamas imbalances too. It thus infers the state of a person's physiological balance or imbalance from their self-perceived state of psychological imbalance.

Analysis of Cronbach's alpha, for the tests found that the Kāśyapa Psychophysiological State Inventory (KPSI) is both consistent and reliable. As regards content validity, the consultations with Āyurveda experts and psychologists established that the questions are appropriate. The instrument does not measure a person's personality characteristics. Rather, it measures mood states in given situations.

7.3 Comparison of KPI & KPSI

Comparing these two inventories to Cattell's well-known State-Trait Anxiety Inventory (STAI), the KPSI represents a form of 'State' assessment, while the KPI falls in the category of 'Trait' assessment.

7.4 Yoga Intervention

In the pre-post study following the development of the KPI, participants' ages must be taken into consideration: ages 5 to 13 are dominated by anabolism related to physical growth and thus naturally exhibit higher levels of Kapha Dośa. In a similar way, ages 13 to 18 are dominated by Pitta Dośa, as the physicality of youth comes into play. Observing higher levels of Pitta and KaphaDośas, when assessing youth in the age range addressed in this study is quite acceptable. The final Dośa Prakṛti scores therefore reflect processes taking place all during the 4- week module practice. Changes generally indicate improved health, since, once imbalances have set in, excess vātadośa tends to drive other dośa further out of balance. They can be interpreted as indicating restoration of DośaPrakṛti values towards their usual ranges for this age group.

Generally, in recent times, because of modern Ahara- Vihara habits common in this stage of life, DośaBalas are found opposite to those expected. Our data therefore indicate that inculcating students with the module's Yoga practices at an early age will help restore desired Dośa balances. Then, as VātaDośa reduces and PittaDośa increases, the memory, intelligence and basic learning skills characteristic of youth should be improved with profound benefits for both the individual and society. Regarding Trigūṇa, practicing dynamic exercises like those in the module will tend to induce sweating, Swedana, or in the hot season increase it. According to the Āyurveda classics, Swedana has the effect of reducing VātaDośa, which will benefit the balance of Trigūṇas by reducing Rajas &Tamas guṇas.

Summary and Conclusion:

The Kāśyapa Prakṛti Inventory and Kāśyapa Psychophysiological State Inventory are valid and reliable instruments to measure the tridośas and Prakṛti in adolescents. Tridośas and trigūṇas measures when used in assessment helps in prevention of the diseases and restoration of health as well. This certainly helps the adolescents to know their strength and weakness and gives a clarity of their well-being. The integrative yoga module helps in showing the effect of vikṛti producing aspects of dośas the Vāta, pitta and kapha and also of trigūṇas sattva, rajas and tamas in the adolescents of this age group 12-18yrs. This definitely indicates the direction of moving towards the promotion of positive health and also keeping in mind the core objective of Āyurveda being "Swasthasyaswaastyarakshanam Aturasyaroganut". Key is Prevention of

diseases. This study implicates that vikṛti producing aspects of Prakṛti elements can be changed or go through modification.