Journal for Re Attach Therapy and Developmental Diversities
eISSN: 2589-7799
2023 December; 6 (10s(2): 2461 -2468

Proposal of a Yoga-Integrated and Ayurveda-Based Personality Framework for Pre-Primary Kids in the Context of Indian Education: Insights from Experts

Rohit Pandey[1], Jyoti Kumar[1]

[1]National Resource Center for Value Education in Engineering, IIT Delhi rohitpandey905@gmail.com; jyoti@design.iitd.ac.in

Abstract.

According to the Ayurvedic tradition, human beings are constituted through foundational principles such as Tridosha, Saptadhatu, Saptaupadhatu, Panchabhuta, and Panchakosha. Among these, the Tridosha are considered central regulators influencing individuals at both physical and psychological levels. The predominance of specific doshas determines one's Prakriti, defined as the innate constitutional nature of a person. Contemporary psychology examines comparable inherent characteristics under the construct of temperament types. The present study investigates the relationship between Tridosha, a concept rooted in Indian philosophical thought, and temperament, a construct in modern psychology. The findings reveal a significant correlation between temperament and Tridosha. Since temperament or Prakriti directly influences learners and their learning behaviours, the study suggests that educating learning facilitators about temperament-related differences in early childhood education may contribute to improved educational outcomes. From this standpoint, expert reviews were undertaken to identify specific yogic practices suitable for kids aged 3-6 years to support the regulation and balance of the doshas. Based on these expert insights, a framework integrating Ayurvedic dietary regulation and selected yogic practices has been proposed to modulate Tridosha and thereby foster an internally balanced and conducive learning environment in pre-primary education.

Key words: Tridosha + Temperament + Children + Personality + Yoga

1 Introduction

India's New Education Policy (NEP) has argued use of traditional knowledge for the holistic development of children [1, p. 50]. The National Curriculum Framework (NCF) further identifies the need to focus on Physical, Socio-emotional, Cognitive, Language, and Aesthetic Development, as per the "Panchakosha" model for holistic child development. This approach includes practices like a healthy diet, traditional games, yoga, and cultural interaction [2, p. 20]. The NEP argues for play-based and inquiry-based learning in pre-primary education. It is argued here that NEOP and NCF provide a new opportunity to investigate how traditional Indian knowledge of Yoga and Ayurveda can help in the achievement of the goals of education. While modern research on personality has shown some linkages between personality and education, there is very little knowledge on how to design pedagogical interventions for learners of different temperaments. Ancient Indian knowledge systems around the concept of Prakriti seem to have an intricately interwoven understanding of the Prakrti of a human and its personal implications. This study reports an attempt to formulate a model for the practice of yoga and ayurveda in early childhood education in light of the modern research on temperament and the ancient concept of Prakriti. This paper has first investigated whether the concept of Tridosha is correlated to the modern psychological concepts of temperament and then has proposed Ayurveda and yoga-based practices that can aid the temperament management of children during early childhood education based on expert reviews.

1.1 Tridosha

The concept of Tridosha in Ayurveda encompasses three primary doshas: Vata, Pitta, and Kapha [3]. Each dosha is described to govern specific physiological and psychological functions. Vata regulates movement and coordination within the body and is linked to characteristics such as impulsivity, restlessness, and a propensity for quick tempers. Pitta plays a role in regulating body heat, metabolism, digestion, and overall well-being [4]. Pitta is linked with a quick temper. Kapha is responsible for the process of building and nourishing the body. Individuals with a Kapha constitution exhibit a robust physique and stable disposition [3]. Imbalances in these doshas lead to a range of physiological and psychological issues, making it crucial to maintain their equilibrium through diet and lifestyle adjustments [3], [4]. These doshas are said to be integral to an individual's Prakriti, which encompasses natural body processes and behaviours in response to the environment [5]. Ayurveda argues that understanding and maintaining a balance of these doshas' is essential for overall health and well-being. This paper argues that this mental and physical well-being is also the goal of the education and thus this understanding of the innate prakriti of the child will play a crucial role in the pedagogical planning of early childhood education.

1.2 Temperament

Temperament is a concept prevalent in modern personality psychology and is defined as the basic disposition in areas of activity, affectivity, attention, and self-regulation which result from intricate interactions between biological, genetic, and environmental factors [6]. One of the models of temperament argued that it (a) constitutes a vital element, (b) emerges from the early stages of infancy, (c) has its foundations in biology, (d) is, to some extent, influenced by genetics, (e) tends to exhibit a higher degree of stability when compared to other personality traits, and (f) can also be observed in the behavior of animals [7]. Many different attempts to link the temperament to physical elements [8], appearances [9] and even disease susceptibility [8].

1.3 Temperament and early childhood education

Temperament in preschool has been shown to relate to children's behavioral and social adjustment [10], [11]. After a child enters primary school, characteristics that are theoretically linked to effortful control continue to be predictive of academic success, especially as measured by improved report card grades [12]. Early childhood peer interactions have been reportedly associated with children's social and intellectual results [13], [14]. Compared to children who have more negative peer relationships, those who have more positive peer interactions typically enjoy school more and exhibit more adaptive behaviors. Children seem to be more likely to establish a sense of security and belonging through favorable peer interactions, which supports their social and academic development [15]. The relationship between children's temperament and their later interactions with peers was found to be mediated by teacher-child conflict in the early elementary grades [16]. It is crucial to take into account children's temperamental characteristics and the quality of the teacher-student bond when analyzing the learning outcomes [16]. In light of the reported research, this paper argues that understanding temperament or Prakriti has usefulness in pre-primary education.

1.4 Temperament models

To study the parallels between constructs of tridoshas and temperament, prevalent models of temperament in modern literature were surveyed. Evans and Rothbart (2007) have reported five factors of temperament, namely, affiliativeness, extraversion, negative affect, and orienting sensitivity. Three of the temperamental traits involved affective and motivational processes (affiliativeness, extraversion/positive emotionality, and negative affect), and two of them had to do with attention (orienting sensitivity and effortful control) [17]. Mary K. Rothbart suggested four dimensions and thirteen subdimensions in her "Rothbart Model of Temperament." The negative affect dimension consists of four subdimensions: sadness (lowered mood and energy related to exposure to suffering, disappointment, and object loss), fear (anticipation of distress), frustration (related to interruption of ongoing tasks or goal blocking), and discomfort (related to sensory qualities of stimulation, including intensity, rate, or complexity). Three subdimensions comprise the extraversion/surgency dimension: positive affect (its strength, duration, frequency, rate of initiation, and rising intensity of pleasure), high-intensity pleasure (a sensation-seeking construct), and sociability (enjoying presence and contact with others). Three subdimensions make up the broad temperament construct of "effortful control," which is based on the executive attention system: activation control (the ability to carry out an action when there is a strong tendency to avoid it), inhibitory control (the inhibition of inappropriate behavior), and focused attention (focus and shifting). In summary, orienting sensitivity is the ability to process information automatically, both internally (such as images and ideas that arise spontaneously) and externally (such as perception of stimuli unrelated to the demands of the current task). It is assessed using three subdimensions: general perceptual sensitivity (which is the awareness of mild, low-intensity stimulation that arises from the internal or external environment), affective perceptual sensitivity (which is the awareness of affect related to low-intensity stimuli), and associative sensitivity (which measures the frequency and remoteness of automatic cognitive activity) [18], [19]. This paper has used the Rothbart model for the correlational study between Tridoshas and Temperament.

2 Methodology

There are two parts of the study reported in this paper.

Part I: Correlational Study between Tridoshas and Temperament

Method: Correlation between dimensions of standard questionnaires

Sample: 160 participants were recruited using convenience sampling procedures. The participants were students pursuing their bachelor's degrees at IIT Delhi. They voluntarily filled out the two questionnaires, namely

1. VPK Questionnaire (Dondogdorj & Tungalag, 2008) assessed the participants' Tridosha profiles, measuring their levels of Vata, Pitta, and Kapha.
2. Adult Temperament Questionnaire (ATQ) (Rothbart, 1988) collected self-reported constructs of effortful control, negative affect, extraversion/surgency, and orienting sensitivity on 77 items.

As the children could not be administered with the VPK or the ATQ questionnaires due to their age and understanding levels, it has been assumed in this paper that the tridoshas and temperaments have a similar bearing across the ages. The reason for assuming this is that Prakriti in IKS and temperament in modern psychology study dispositions which are applicable across the age group.

Data Collection and Analysis Procedures: Online questionnaires using Google Forms were used as the data collection method. Two separate forms were created. These forms were sent to the willing participants who were approached personally by the authors and data was collected over one week. The collected data was coded and statistical correlations between the dimensions and subdimensions were calculated.

Part II: Development of a framework for Prakriti-centric pedagogy

Method: Expert review and literature review

Sample: 10 yoga experts were interviewed, one persona at a time, for 30-40 mins each with the help of a rating scale designed for the purpose of this study. The literature was surveyed to help develop a framework which can be of use in education in general and early childhood education in particular.

Data Collection and Analysis Procedures: The appropriateness of a set of Yoga postures for 3 to 6-year-old children with the help of experts was identified. A questionnaire was provided to the experts wherein rating on a Likert Scale of 1 to 5, 1 being strongly disagree to 5 being strongly agree to the appropriateness of the asana for children 3-6 years of age. Scores for each Asana and Pranayama were then calculated. These scores were called I-CVI scores meaning Item- Content Validity Scores. The interval threshold value of accepting a particular technique was borrowed from Lynn, 1986 criteria of at least 0.78 and above as an acceptable value [20].

3 Results

Part I: Results of Correlational Study

From the two standardized questionnaires of temperament and tridoshas, it was observed that Vata was significantly correlated with effortful control (-0.346) and Negative affect (0.298), Pitta was significantly correlated with Orienting Sensitivity (0.337), Effortful Control (0.160) and Kapha was significantly correlated with Extraversion (0.173), Effortful Control (0.265) as depicted in Table 1.

Table 1: *Correlation between dimensions of Temperament and Tridosha*

	Orienting Sensitivity	**Extraversion**	**Effortful Control**	**Negative affect**
Vata	-0.07	-0.088	-0.346 ***	0.298 ***
Pitta	0.337 ***	0.115	0.160 *	-0.04
Kapha	0.117	0.173 *	0.265 ***	-0.127

Also, among the subdivisions, Vata was significantly correlated with Fear (0.284), Frustration (0.337), Inhibitory Control (-0.245), Activation Control(-0.247), Attentional Control (-0.252), Pitta was significantly correlated with Activation Control (0.297), Neutral Perceptual Sensitivity (0.318), Affective Perceptual Sensitivity (0.226), Associative Sensitivity (0.231) and Kapha was significantly correlated with Frustration (-0.207), Activation Control (0.368) as depicted in Table 2.

Table 2: *Correlation between dimensions of Temperament and Tridosha*

Temperament Dimensions	Temperament Subdimentions	**Vata**	**Pitta**	**Kapha**
Negative affect	Fear	0.284 ***	-0.141	-0.08
	Frustration	0.337 ***	0.107	-0.207 **
	Sadness	0.114	-0.063	-0.066
	Discomfort	0.033	0.02	0.019
Effortful Control	Inhibitory Control	-0.245 **	-0.114	0.034
	Activation Control	-0.247 **	0.297 ***	0.368 ***

	Attentional Control	-0.252 **	0.119	0.126
Extraversion	Sociability	-0.03	0.102	0.124
	High Pleasure	-0.022	0.122	0.135
	Positive Affect	-0.159	0.015	0.118
Orienting Sensitivity	Neutral Perceptual Sensitivity	-0.093	0.318 ***	0.127
	Affective Perceptual Sensitivity	-0.035	0.226 **	0.048
	Associative Sensitivity	-0.032	0.231 **	0.096

Part II: Development of a framework

The objective of this part of the research was to develop a framework with an aim to aid the learning facilitators in early childhood education. However, this framework may not be limited to early childhood education alone and may be used at other levels as well. As evident from the literature, temperament plays a role in educational outcomes. However, methods to modulate the temperament have not been as detailed as the parallel concept of Prakriti in Indian Knowledge Systems (IKS). Here, literature from IKS, namely Yoga and Ayurveda have been sought for the purpose of developing a framework that can be used by learning facilitators.

First, an expert review was conducted with ten yoga experts to identify suitable pranayama and asanas for young children between 3-6 years of age. Four out of ten experts were faculty at university teaching yoga, another four were yoga teachers with a minimum of five years of experience as yoga teachers and rest two were doctors with specialization in joint and muscle therapy. They were asked to evaluate a list of pranayama (table 5) and asanas (table 6) for their suitability for young children. As there are no guidelines available for yoga asanas and pranayamas for young children, this exercise was undertaken.

Table 3: *Expert Review of Pranayama Techniques*

Pranayama	**I-ICV**	**Pranayama**	**I-ICV**
Surya Bhedi	0.5	Sheetkari	0.8
Ujjayi	0.6	Anulom-Vilom	0.6
Sheetali	0.9	Kapalabhati	0.3
Bhastrika	0.5	Chandrabhedi	0.4
Bhramari	0.9	Sahita Kumbhaka	0
Murchha	0.1	Keval Kumbhaka	0.1
Plavani	0		

Table 4 *Expert Review of Asana Techniques*

Aasan	**I-ICV**	**Aasan**	**I-ICV**	**Asana**	**I-ICV**
Mandukasana	0.9	Ustrasana	0.4	Makarasana	1.0
Uttanakurmasana	0.9	Hanumanasana	0.3	Utkatasana	1.0
Kurmasana	0.3	Shashakasana	1.0	Vrishabhasana	1.0
Vyaghrasana	0.9	Shark Pose	0.9	Halasana	0.3
Kukkutasana	0.0	Garudasana	0.6	Vrishchikasana	0.0
Vrikshasana	0.8	Shalabha Asana	1.0	Kapotasana	0.9
Tadasana	1.0	Ardha Chandrasana	0.8	Bhujangasana	1.0
Tiryak Tadasana	.0	Setu Bandha Asana	0.7	Trikonasana	1.0
Mayurasana	0.1	Gomukhasana	1.0	Marjariasana	0.9
Matsyasana	0.5	Saral Dhanurasana	0.9	Titli Asana	1.0
Shavasana	1.0	Adho Mukha Shvanasana	1.0	Janu Shirshasana	0.5

Simhasana	1.0	Phalakasana	0.9	Double Leg Stretch	1.0
Shuturmurgasana	0.4	Ananda Balasana	1.0	Mandukasana Dvitiya Bhag	0.6
Gajaasana	0.8	Udarakarshana Asana	0.9	Veer Bhadrasana	1.0
Bakasana	0.0	Baddha Ardha Chandrasana	0.0	Bhujangasana	0.7
Naukasana	1.0	Sitting Spinal Twist	0.6	Naukasana - 1	0.9
Viparita Naukasana	1.0	Surya Namaskar	0.7	Padangusthasana	0.9

This paper argues that based on the expert review reported in table 4, asanas with a score of 0.78 and above can be used for 3 to 6-year-old children. The recommended asanas thus are Frog Pose, Extended Tortoise Pose, Tiger Pose, Tree Pose, Mountain Pose, Tiryak Tadasana (Swaying Palm Tree Pose), Simhasana, Gajaasana (Elephant Pose), Naukasana (Boat Pose), Viparita Naukasana (Inverted Boat Pose), Shashakasana (Rabbit Pose), Shark Pose, Shalabha Asana (Locust Pose), Ardha Chandrasana (Half Moon Pose), Gomukhasana (Cow Face Pose), Saral Dhanurasana (Easy Bow Pose), Adho Mukha Shvanasana (Downward-Facing Dog Pose), Phalakasana (Plank Pose), Ananda Balasana (Happy Baby Pose), Udarakarshana Asana (Abdominal Twist Pose), Makarasana (Crocodile Pose), Utkatasana (Chair Pose), Vrishabhasana (Bull Pose), Kapotasana (Pigeon Pose), Bhujangasana (Cobra Pose), Trikonasana (Triangle Pose), Marjariasana / Marjara Asana (Cat-Cow Pose), Titli Asana (Butterfly Pose), Double Leg Stretch, Veer Bhadrasana (Warrior Pose), Naukasana - 1 (Boat Pose - Variation 1), Padangusthasana (Big Toe Pose).

Similarly, Pranayama with a score of 0.78 and above, can be considered for 3 to 6-year-old children. These include, Sheetali, Bhramari and Sheetkari.

A literature review on Ayurveda suggests that there are food intakes which have an influence on the tridoshas (cite). for example, sweet-tasting food like fruits, dairy products and grains have the potential to aggravate kapha and decrease vata and pitta (cite). Further, Ayurveda identifies six seasons, which play a role in the accumulation, aggravation, and alleviation of doshas. This concept is described in Sushruta's Sutrasthana (6/10). According to the effects of these seasons and their inherent qualities, both dosha accumulation and aggravation, as well as their subsequent pacification, occur. Vagbhata has presented the following principles शीते वर्षा वाद्यांखीन् वसन्तेऽन्यान् रान्भजेत्। स्वादुदिशादिस्वदुतान्। शरद्वसन्तयोः रूक्षं शीतं धर्मघनान्तयोः । अन्नपानं समासेन विपरीतमतोऽन्यथा ॥ नित्यं सर्वरसाभ्यासः स्वस्वाधिक्यमृतावृतौ ।(अष्टांग हृदय सू. 3:55-57). Like for example, the rainy season aggravates vata and hence it is expected that vata-pacifying food and lifestyle be adopted during the rainy season.

It is proposed that as depicted in fig 1, the learning facilitator has his/her own inner prakriti which is under the influence of the external prakriti (food, seasons, lifestyle etc.) and so does each of the children in the class. If a prakriti is observed in the child or himself/herself, it is expected that the facilitator will take remedial measures by using Ayurveda and yoga practices.

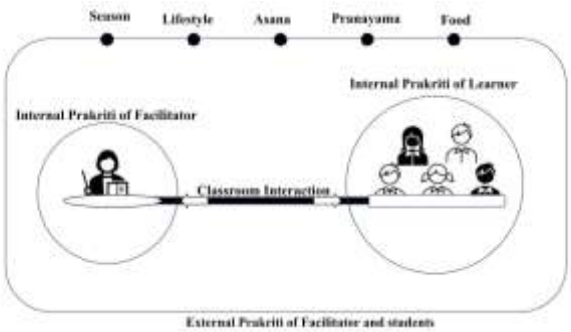

Fig 1: A proposed framework for Prakriti-Centric Pedagogy

Further, the Importance of Yoga in regulating the Tridoshas has been argued [21]. Bhastrika Pranayama eliminates the illnesses caused by the imbalance of the tridoshas [22], [23]. Also, suryabhedi pranayama has the potential to improve the balance of the tridoshas [24]. Bhramari Pranayama has been reported to be beneficial in the improving cardio-respiratory endurance of Pitta Prakriti individuals [25]. Anulom Vilom Pranayam has an effect on anger control which is pittaja [26]. In general, pranayam keeps the dosha's equilibrium intact. Vata is the master dosha and the expression of Prana, and it becomes normal with proper Pranayam exercise. Unique pranayams called Shitali and Shitakari counteract Pitta and eliminate heat [27]. Nadi Shodhana Pranayam balances Vata, Shitali Pranayam balances Pitta and Bhastrika

Pranayam balances Kapha [21]. While Vata dosha is also referred to as the source of energy in Ayurveda, Prana is indicative of the condition of absolute energy in Pranayam. Vata dosha generates and regulates all physiological actions. Similar to Vata Dosha, Pranayam is in charge of igniting jatharagni and preserving dosha equilibrium. This means that Vata, the master dosha and manifestation of Prana, becomes normal with proper Pranayam practice [27].

Apart from Pranayama, asanas have also been recommended for the balance in Prakriti. To balance vata, a focus on calming and grounding asanas like Uttanasana, Balasana, Supta Virasana, Dhanurasana, Virasana, Siddhasana, Padmasana, and Savasana, which help alleviate vata-related symptoms and promote relaxation are useful [21]. For pitta, calming asanas that balance the solar plexus and aid digestion, like Ustrasana, Bhujangasana, and Dhanurasana, are recommended [21]. Practice stimulating and chest-opening asanas such as Suryanamaskar, Setu Bandhasana, and Ustrasana to counterbalance the heavy, chilly quality of Kapha. This will help avoid and treat diseases like obesity and congestion. For kapha people, these poses also encourage the flow of energy from the heart chakra and emotional stability [21].

A comprehensive method for balancing the three doshas—Pitta, Kapha, and Vata—is yoga. Soothing poses like Child's Pose (Balasana) and grounding Thunderbolt Pose (Vajrasana) assist soothe anxiety and restlessness for Vata dosha, which is characterized by properties of air and ether. Vata energy is warmed and stabilized during the Sun Salutation, Garland Pose (Malasana), and Upward Hands Pose (Urdvha Hastasana). Cooling poses like Child's Pose (Balasana) and Cat/Cow Pose (Marjaryasana/Bitilasana) soothe irritability and excess heat for Pitta dosha, which represents attributes of fire and water. Asanas such as Full Forward Bend (Paschimottanasana) and Seated Spinal Twist Pose (Ardha Matsyendrasana) help release tension. The Sun Salutation is a place to start. Lastly, energetic poses like Triangle Pose (Trikonasana) and Warrior Pose (Virabhadrasana) encourage circulation and vitality for those with Kapha dosha, which is associated with earth and water properties. Sun Salutation is a great option. To counterbalance Kapha's heaviness, try Boat Pose (Navasana), Cobra Pose (Bhujangasana), and Peacock Pose (Mayurasana), which all promote strength and vigour. Adapting your practice to your dosha can assist in achieving mental and physical well-being [28]. Asanas against the tridoshas have been tabulated in table 5 with reference to their sources.

Table 5 *List of Aansa Recommended for Balancing Tridoshas*

	Source	**Asana**	**Pranayam**
Vata	Hathpradipika	*Mayurasana, Padmasana, Bhadrasana, Matsyendrasana*	*All Pranayam - सर्व रोग विनाशनम् Sooryabhedi, Bhastrika*
	Gherand Sanhita	*Bhadrasana, Simhasana, Bhujangasana*	
	Hath Ratnavali		*Suryabhedi, Bhastrika*
	Yogabeeja		*Suryabhedi, Bhastrika*
Pitta	Hathpradipika	*Mayurasana, Padmasana, Bhadrasana, Matsyendrasana*	*Bhastrika, Sheetali*
	Gherand Sanhita		*Sheetali*
	Hathratnavali		*Sheetali, Bhastrika*
	Yogabeeja		*Sheetali, Bhastrika*
Kapha	Hathpradipika	*Mayurasana, Padmasana, Bhadrasana*	*All Pranayam - सर्व रोग विनाशनम् Kapal Bhati, Ujjayi*
	Gherand Sanhita		*Kapal Bhati, Ujjayi, Sheetali*
	Hathratnavali		*Bhastrika*
	Yogabeeja		*Ujjayi, Bhastrika*

5 Discussions and Conclusions

In this research paper, constructs of Temperament and Tridosha, were found to be correlated. This finding will help apply the modern reports on the influence of temperament on learning behaviours and outcomes onto the ancient concept of Prakriti and pave the way for a seamless integration of the modern science and ancient science which so far have appeared to be disconnected in their methods and intents. The benefits of such a connection have been argued in this paper to be

manyfold. While in modern science very little research is available that educates a learning facilitator on how to modulate the 'temperament', the ancient concept of 'Prakriti' has been found to be an interwoven concept which is related to seasons, food, lifestyle, and stage of life etc. and there are ways subscribed by which these can be modulated. The origin of ancient knowledge systems is unknown, but modern science is systematic and rigorous. Integrating the two knowledge systems may benefit modern life processes like education. For example, Vata Dosha which is associated with traits like impulsivity, distractibility, and emotional reactivity is negatively correlated with Effortful Control and Attentional Control. Vata gets aggravated in the rainy season as per the Indian knowledge system and can be calmed through pranamaya, food habits and lifestyle modifications. It is argued here that this knowledge can be of much use in the pedagogical practices in education. There has been an increased focus on social-emotional learning in modern times. However social-emotional competencies are also tied to the Prakriti of an individual which has not been accommodated in the modern pedagogical plans. It is noteworthy that vata individuals are more likely to experience negative affect such as fear and frustration. This understanding can help the learning facilitators identify individual differences and design pedagogical plans to accordingly give personal attention to the growth of the learners. This is very important in early childhood education as the emotional development in early childhood has been reported to be very important due to the developmental spurts in childhood.

References

[1] Govt of india, "NEP 2020," 2020. [Online]. https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf
[2] Govt. of India, "NCF 2022." [Online]. https://ncert.nic.in/pdf/NCF_for_Foundational_Stage_20_October_2022.pdf
[3] A.Sharma, *Sushrut Samhita*, vol. 2. varanasi: Chaukhamba Publishig House, 2023.
[4] K. A. Gupta, *Charak Sanhita*, vol. 2. in 2, vol. 2. Banaras: Bhargav Pustakalay, 1948.
[5] N.A. Muthuswami, *Rasvaishaishikasutra*. Kerala: Authority of the goverment of karala by Dr. N. Sridharan, 1976.
[6] R. L. Shiner, K. A. Buss, S. G. McClowry, S. P. Putnam, K. J. Saudino, and M. Zentner, "What is temperament now? Assessing progress in temperament research on the twenty-fifth anniversary of goldsmith et al. (),"* Child Dev. Perspect.*, Jul. 2012, doi: 10.1111/j.1750-8606.2012.00254.x.
[7] J. Strelau, "Temperament," in *Encyclopedia of Personality and Individual Differences*, V. Zeigler-Hill and T. K. Shackelford, Eds., Cham: Springer International Publishing, 2020, pp. 5388–5407.
[8] F. S. S. A. M. A. Md. Tanwir Alam, "Concept of temperament: A review," *International Journal of Unani and Integrative Medicine*, 2019.
[9] E. Kretschmer, *Physique and Character: An investigation of the nature of constitution and of the Theory*. Routledge, 2013.
[10] B. Nelson, R. P. Martin, S. Hodge, and V. Havill, "Modeling the prediction of elementary school adjustment from preschool temperament," *and individual differences*, 1999.
[11] C. T. Ball, L. E. Pelco, V. Havill, and E. Reed-Victor, "Confirmatory Factor Analysis of the Temperament Assessment Battery for Children-Revised: Parent Form," *J. Psychoeduc. Assess.*, vol. 19, no. 4, pp. 365–379, Dec. 2001.
[12] A. L. Duckworth and K. M. Allred, "Temperament in the classroom," 2012, [Online]. Available: https://repository.upenn.edu/psychology_papers/1/
[13] G. W. Ladd, B. J. Kochenderfer, and C. C. Coleman, "Friendship quality as a predictor of young children's early school adjustment," *Child Dev.*, vol. 67, no. 3, pp. 1103–1118, Jun. 1996.
[14] G. W. Ladd and J. M. Price, "Predicting Children's Social and School Adjustment Following the Transition from Preschool to Kindergarten," *Child Dev.*, vol. 58, no. 5, pp. 1168–1189, 1987.
[15] K. H. Rubin, R. Coplan, X. Chen, and J. Bowker, "Peer relationships in childhood," *Development*, 2013, doi: 10.4324/9780203813386-12/peer-relationships-childhood-kenneth-rubin-robert-coplan-xinyin-chen-julie-bowker-kristina-mcdonald.
[16] K. M. Rudasill, K. Niehaus, E. Buhs, and J. M. White, "Temperament in early childhood and peer interactions in third grade: The role of teacher–child relationships in early elementary grades," *J. Sch. Psychol.*, 2013.
[17] D. E. Evans and M. K. Rothbart, "A Two-Factor Model of Temperament," *Pers. Individ. Dif.*, vol. 47, no. 6, pp. 565–570, Oct. 2009.
[18] D. E. Evans and M. K. Rothbart, "Developing a model for adult temperament," *J. Res. Pers.*, vol. 41, no. 4, pp. 868–888, Aug. 2007.
[19] M. K. Rothbart, S. A. Ahadi, and D. E. Evans, "Temperament and personality: origins and outcomes," *J. Pers. Soc. Psychol.*, vol. 78, no. 1, pp. 122–135, Jan. 2000.
[20] M. S. B. Yusof, "ABC of content validation and content validity index calculation," vol. 11, no. 2, 2019, doi: 10.21315/eimj2019.11.2.6.
[21] H. S. Rathore, "Yoga for balancing the doshas." https://www.theyogicjournal.com/pdf/2019/vol4issue1/PartY/5-1-30-989.pdf (accessed Nov. 06, 2023).

[22] M. L. Gharote, P. Devnath, and V. K. Jha, "Hatharatnavali of Srinivasayogi," *Lonavla: The Lonavla Yoga Institute (India),* 2002.
[23] Muktibodhananda, *Hathyog Pradipika*. Shri Satguru Publication, 2012.
[24] A. Gupta, R. Kumar, and N. K. Yadav, "Role of pranayama in yogic management of vata diseases." https://ijisrt.com/assets/upload/files/IJISRT22JUL979.pdf (accessed Nov. 06, 2023).
[25] K. B. P. Bhushan, N. Nathani, and N. S. Tripathi, "Impact of Bhramari Pranayama on Cardio Respiratory Endurance among the Cricket Players with Special Reference to Prakriti (Psycho-somatic Constitution)," *J. Int. Counc. Health Phys. Educ. Recr. Sport Dance*, vol. 2, no. 9, pp. 08–13, 2017.
[26] Anagha, A. K. Rai, and R. Hegde, "Comparative clinical study to evaluate the efficacy of Geetam and chandranulomaviloma pranayama in Krodha," *October 2021*, vol. 9, no. 10, pp. 2371–2377, Oct. 2021.
[27] H. Chudasama, D. Makwana, A. Solanki, and C. R. Yadav, "Pranayam – essential physiological action: A conceptual study." doi: 10.20959/wjpr2022-24469.
[28] S. Kshirsagar, *Ayurveda Ancient Wisdom for a Modern Lifestyle*. Sounds True, Inc , Boulder, CO 80306, 2014.