

PART-1

A study on prakrti with respect to āhāra, vihāra and vicāra

PART-2

**Development of Dhanwantri personality inventory based on tridosā
with respect to āhāra, vihāra and vicāra**

A DISSERTATION SUBMITTED BY

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UNDER THE GUIDANCE OF

**Dr H R NAGENDRA
Dr R NAGARATHNA**

Towards the partial fulfillment of the
MASTER'S DEGREE IN YOGA (MSc)

TO

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CERTIFICATE

This is to certify that Dr. Vasudeva vaidya is submitting this dissertation comprising of literature research '**A study on prakṛti with respect to āhāra, vihāra and vicāra** and experimental research on **Development and standardization of personality questionnaire based on tridoṣa with respect to āhāra, vihāra and vicāra**' in partial fulfillment of the requirements for the Master of Yoga registered with effect from Jan 12th 2002 to Jan 12th 2006 at Swami Vivekananda Yoga Anusandhana Samsthana and is a record of the work carried out by him in this institute.

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DECLARATION

I, hereby, declare that this study was conducted by me at Swami Vivekananda Yoga Anusandhana Samsthana (a Deemed University) Bangalore under the guidance of Dr H R Nagendra, Vice chancellor, SVYASA and Dr R Nagaratna, dean of life sciences, SVYASA, Bangalore.

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Part1: Literary Research

A study on prakti with respect to āhāra, vihāra and vicāra

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ABSTRACT

Ayurveda presents the personality as “prakṛti”, a sanskrit word. The word prakṛti means “nature” or natural form of constitution of body.

It consists of two syllables “pra” and “kṛti”. “pra” when used as a prefix to verbs means forward, forth, onward, before, in front. With adjectives it may vary excessively and with nouns it means beginning, commencement, source of origin. The syllable kṛti means manufacturing, creation, performing and is derived from the root “kṛ” which means to perform, to form, to arrange etc. Therefore they jointly mean “natural form” or the status, the original source. When a man is in the original state without change in the anatomy or physiological functions, completely in good health he may be said to be in prakṛti state. Here an attempt is made to compile all the information about the prakṛti as explained in ayurvedic scriptures.

CHAPTER 1

INTRODUCTION

Human being is a social animal and he is also a product of social circumstances. Society influences his life. He also influences the society. In the process of the interaction between human and society, a kind of characteristics emerge in man, which can be considered as his way of behavior and subsequently that becomes the pattern of his life which is called personality. There are many ways of understanding and interpreting these characteristics and from time to time many scholars tried to define them. Theories, speculations and hypothesis are developed all over the world, defining and assessing human behaviour in terms of his unique traits and types. According to Allport's definition "personality is the dynamic organization within the individual of those psychophysical systems that determine his unique adjustments to his environment". (1937) Personality, thus according to this definition includes three aspects of an individual, the psychological, the biological and environmental aspects of an individual.

The personality is also defined as "the sum total of characters that differentiate people, the stability in a person's behavior across different situations" (Robert. S. Feldman 1996).

Personality encompasses the relatively enduring, characteristics that differentiate people based on behavior which makes each of us unique. It is also personality that leads us to act in a consistent and predictable manner both in different situations and over extended period of time. The biological aspects consisting of genetic, neurophysiologic, neurochemical and neurochronological components predispose the individual for a particular behavior that she/he may exhibit. This in interaction with socio-cultural

components that is learning, language, religion and society as a whole influence the development of personality (Bronck 1954). Since personality develops in the context of the society, it is beneficial to note and understand it through the ideas put forth in each culture in the form of scientific and empirical studies. In the West, various viewpoints have been put forth by different scholars with reference to the concept of personality.

In the East there are rich sources of psychological knowledge in the religious texts and practices and Indian sciences like yoga and Ayurveda.

Yoga and Ayurveda view that the creation of personality does not lie in only physical expression but also in the unification of mind. Ayurvedic and other Indian thinkers view that, human personality also can be expressed through his/her likes and dislikes of food, its quantity and taste, one's thought and actions also.

Ayurveda presents the personality as prakṛti, a sanskrit word. The word prakṛti means "nature" or natural form of constitution of body. It consists of two syllables "pra" and "kṛti". "pra" when used as a prefix to verbs means forward, forth, onward, before, in front. With adjectives it may vary excessively and with nouns it means beginning, commencement, source of origin. The syllable kṛti means manufacturing, creation, performing and is derived from the root "kṛ" which means to perform, to form, to arrange etc. Therefore they jointly mean "natural form" or the status, the original source. When a man is in the original state without change in the anatomy or physiological functions, completely in good health he may be said to be in prakṛti state. The word "vikṛti" is used as the opposite of prakṛti which means unnatural form, sickness changed from the original state.

Ayurveda has highly emphasized the prakṛti state of a person before the examination of diseased condition. If we know the original way of functioning or the state of the body it is very easy to guide the patient to avoid sickness and possible derangements and one can also promote one's positive health by advising proper and suitable way of life and food habits for particular seasons. By knowing prakṛti one can also get advice for suitable profession as well as suitable partner which is suitable for him.

Ayurveda has described ten types of examining a patient to come to diagnosis of his/her problem. The prakṛti examination is the first among them. The experts in modern science want to know what type of disease a patient is suffering from. On the contrary the expert in Ayurveda wants to know what type of person is suffering from the disease. If we know the type of original nature or personality it's very easy to know about the disease and treatment.

Prakṛti is mainly divided into two main types: deha prakṛti and mānasika prakṛti. Deha prakṛti is of 7 types, vāta, pitta, kapha, vāta – pitta, vāta -kapha, pitta-kapha and vāta -pitta-kapha prakṛti.

Prakṛti is formed in the womb of the mother at the time of conception and is also affected by the doṣa predominant in foetal circulation. The four factors play very important roles for the formation of Prakṛti. They are:

a) śukra śonita

śukra means sperm and śonita means ovum. prakṛti is also formed according to the dominant doṣas in the sperm and ovum at the time of conception. That is, the type of doṣa dominating is determined by

heredity factors in sperm and ovum. Caraka has described bīja and bīja bhāga, a term similar to genes. These factors come from our ancestors to create some similar properties in future generations, such as similarity of complexion, eyes, voice etc.

b) Kāla garbhāśaya

kāla means time. Garbhāśaya means uterus. The condition of the uterus at the time of conception has great influence in the formation of prakrti. The uterus may be vitiated by vāta, pitta and kapha as well as rajas and tamas. prakrti may be formed according to the excess of one or one of the dosa in the uterus of the mother.

c) Mātr āhāra vihāra

The diet taken by the mother and her behavior during the pregnancy serves to increase or decrease a particular doṣa. Therefore, some changes are possible after the influence of the uterine doṣa at the time of conception.

d) Mahābhūta vikāra:

Pañca mahābhūta which are predominant during conception also play a key role.

The characteristics of various prakrti types are explained by different authors.

42.1 Caraka saṁhitā

चरक संहिता

Caraka in sūtra sthāna tells about prakṛti in his seventh chapter.

समपित्तानिलकफाः केचिद्गर्भादि मानवाः ।

दृश्यन्ते वातलाः केचित् पित्तलाः श्लेष्मलाः तथा ॥

Samapittānilakaphāḥ kecidgarbhādi mānavāḥ ।

Drśyante vātalāḥ kecit pittalāḥ śleṣmalāḥ tathā ॥

तेषां अनातुराः पूर्वे वातलाद्याः सदातुराः ।

दोषानुशयिता ह्येषां देहप्रकृतिरुच्यते ॥ च सू अ ७ । ३९-४०

Teṣāṁ anāturāḥ pūrve vātalādyāḥ sa
dāturāḥ ।

Doṣānuśayitā hyeṣāṁ dehaprakṛtirucyate ॥ ca sū a 7| 39-40

Some persons maintain the equilibrium of vāta, pitta and kapha from

the very time of conception. Some are dominated by vāta, some by pitta and some by kapha.

Those of vāta are not susceptible to diseases and the rest of them are

always likely to suffer. The body constitution of the person is named according to the predominance of dosas.

विपरीतगुणस्तेषां स्वस्थ वृत्तेर्विधिर्हितः ।

समसर्वरसं सात्म्यं समधातोः प्रशस्यते ॥ च सू अ ७ -४१

Viparītaguṇasteṣāṁ svastha vṛttervidhirhitaḥ ।

Samasarvarasaṁ sātmyaṁ samadhātoḥ praśasyate ॥(ca sū a 7/41)

To maintain positive health, the diets and regimen which stand in contradistinction with the doṣas responsible for the production of particular prakṛti. For individual of samapṛakṛti, habitual intake of diets consisting of all tasted in proportionate quantity is prescribed.

Characteristics of vātalā individuals:

वातस्तु रूक्षलघुचलबहुशीघ्रशीतपरुष विशदः । तस्य रौक्षाद्वातला रूक्षापचिताल्प शरीराः ।
 प्रततरूक्षक्षामसन्नसक्तजर्जरस्वरा । जागरूकाश्च भवन्ति
 लघुत्वान्नलघुचपलगतिचेष्टाहारव्याहाराः । चलत्वादनवस्थितसन्ध्यक्षिभ्रूहन्व ओष्ठजिह्वाशिरः
 स्कन्धपाणिपादाः । बहुत्वाद् बहुप्रलापकण्डरासिराप्रतानाः शीघ्रत्वात्
 शीघ्रसमारम्भक्षोभविकारः शीघ्रत्रासरागविरागाः श्रुतग्राहिणोऽल्पस्मृतयश्च । शैत्या शीत
 असहिष्णवः प्रततशीतकोद्वेपक स्तम्भाः ।

पारुष्यात् परुषकेशश्मश्रुरोमनखदशनवदनपाणिपादाः । वैशद्यात् स्फुटिताङ्गावयवाः
 सततसन्धिषड्भगामिनश्च भवन्ति । त एवं गुणयोगाद् वातलाः

प्रयेणाल्पबलाश्चाल्पायुषश्चाल्पापत्याश्चाल्पसाधनाश्चल्पघनाश्च भवन्ति । च वि ८-१८

Vātaṣtu rūkṣalaghucalabahuśīghraśītaparuṣa viśadaḥ । Tasya
 raukṣādvātalā rūkṣāpacitālpa śarīrāḥ
 pratatarūkṣakṣāmasannasaktajarjarasvarā । Jāgarūkāśca bhavanti
 laghutvāllaghucapalagaticeṣṭāhārvyāhārāḥ ।
 calatvādanavasthitasandhyakṣibhrūhanva oṣṭajihvāśiraḥ
 skandhapāṇipādāḥ । bahutvād bahupralāpakaṇḍarāsirāpratānāḥ ।
 śighratvāt śighrasamārambhakṣobhavikārah śighratrāsarāgavirāgāḥ
 śrutagrāhiṇo'lpasmṛtayaśca । śaityā śīta asahiṣṇavaḥ
 pratataśītakodvepakastambhaḥ । pārūṣyāt
 parūṣakeśāśmaśruromanakhadaśanavadanapāṇipādāḥ । vaiśadyāt

sphuṭitāṅgāvayavāḥ satatasandhiśabdhaḡāminaśca bhavanti । ta
evamḡuṇayogādvātalāḡprayeṅālpabalāścālpāyuśaścālpapatyāścalpas
ādhanāścalpadhanāśca bhavanti । (ca vi 8/98)

Vāta is unctuous, light, mobile, abundant in quantity, swift, cold, rough and non-slime. Due to unctuous quality of vāta the voice of the person is low, dry, broken, obstructed and hoarse voice. He gets less sleep and will be awake most of the time. Due to the light quality, he is inconsistent in his action, food and movement. Due to the mobile quality his mind is very unstable.

Due to the abundance quality, he is talkative. Due to swift quality, he is quick in initiating actions, he gets irritated and onset of morbid manifestation, quick in affliction with fear, quick in likes and dislikes. He is quick in understanding things and forgetting. Due to the cold quality of vāta, he is intolerant for cold things and often gets afflicted with cold, shivering and stiffness. Due to nonslime quality, there is cracking sound in joints, when they walk. These kinds of persons are mostly possessed with strength, span of life and wealth in lesser quantity.

Characteristics of pittalā individual:

पित्तमुष्णं तीक्ष्णं द्रवं विस्रमम्लं कटुकं च । तस्यौष्ण्यात् पित्तला भवन्त्युष्णासहा
उष्णमुखाःसुकुमारावदातगात्राः । प्रभूतपिप्लुव्यङ्गतिलपिडकाःक्षुत्पिपासावन्तः
क्षिप्रवलीपलितखालित्यदोषाः प्रायो मृदु अल्प कपिलश्मश्रुलोमकेशाश्च तैक्षण्यात्तीपराक्रमाः
तीक्ष्णाग्नेयः प्रभूताशनपानाः क्लेशासहिष्णवो दन्तशूकाः द्रवत्वात् शिथिलमृदुसन्धिमांसाः
प्रभूतसृष्टस्वेदमूत्रपुरीषाश्च विस्रत्वात् प्रभूतपूतिकक्षास्यशिरः शरीरगन्धाः कटु

अम्लत्वादल्पशुक्रव्यवायापत्याः त एवंगुणयोगात् पित्तला मध्यबला मध्यायुषो मध्य

ज्ञानविज्ञानवित्तोपकरणवन्तश्च भवन्ति ॥ च वि ८-१७

Pittamuṣṇam tīkṣṇam dravaṁ visramamlam kaṭukaṁ ca ।
tasyauṣṇyāt pittalā bhavantuṣṇāsahā uṣṇamukhāḥ
sukumārāvadātagātrāḥ ।Prabhūtapipluvyaṅgatilapidakāḥ
kṣutpipāsāvantaḥ kṣipravalīpalitakhālitadoṣāḥ Prāyo mṛdu alpa
kapilaśmaśrulomakeśāścataikṣṇyāttīparākramāḥ tīkṣṇāgnayaḥ
prabhūtāsanapānāḥkleśāsahiṣṇavodantaśūkāḥdravatvātsīthilamṛdus
andhimāmsāḥprabhūtasṛṣṭasvedamūtrapurīṣāścavisratvātprabhūtap
ūtikakṣāsyāśirahśarīragandhāḥKaṭuamlatvādalpaśukravyavāyāpatyā
ḥtaevaṅguṇayogātpittalāmadhyabalāmadhyāyūṣomadhyajñānavijñā
navittopakaraṇavantaśca bhavanti ॥ (ca vi 8/17)

Pitta is sharp, liquid, of fleshy small, sour and pungent. Due to the hot quality of pitta they are intolerant of hot things, having hot face, excessive hunger and thirst. Due to the sharp quality of pitta they have sharp physical strength, strong digestive power, intake of food and drink in large quantities, inability to face difficult situations and glutton habits. Due to the liquor quality, one voids the stools and urine in large quantities and even sweats a lot. Due to the fleshy smell one can experience a bad smell of sweat in axilla, mouth and head. Due to the pungent quality, there is insufficiency of semen, sexual desire and procreation. So the pitta prakṛti person will have moderate strength, moderate span of life and moderate spiritual and materialistic knowledge, wealth and accessories.

Characteristics of kaphajā individual:

श्लेष्मा ही स्निग्धश्लक्ष्णमृदुमधुरसारसान्द्रमन्दस्तिमितगुरुशीतविज्जलाच्छः ।

तस्यस्नेहाच्छ्लेष्मलाः स्निग्धाङ्गाः श्लक्ष्णत्वाच्छ्लक्ष्णाङ्गाः मृदुत्वाद् दृष्टिसुखसुकुमारावदातगात्राः

माधुर्यात् प्रभूतशुक्रव्यवायापत्याः

सारत्वात् सारसंहतस्थिरशरीराः सान्द्रत्वादुपचितपरिपूर्णसर्वाङ्गाः

मन्दत्वान्मन्दचेष्टाहारव्याहराः स्तैमित्यादशीघ्रारम्भक्षोभविकाराः गुरुत्वात्

साराधिष्ठितावस्थितगतयः शैत्यादल्पक्षुत्तृष्णासन्तापस्वेददोषाः ।

विज्जलत्वात् सुश्लिष्टसारसन्धिबन्धनाः तथाऽच्छत्वात् प्रसन्नदर्शनाननाः

प्रसन्नस्निग्धवर्णस्वराश्च भवन्ति । त एवंगुणयोगाच्छ्लेष्मला बलवन्तो वसुमन्तो

विद्यावन्त ओजस्विनः शान्ता आयुष्मन्तश्च भवन्ति । च वि ८-१६

śleṣmāhīsniḡdhaślakṣṇamṛdumadhurasārasāndramandastimitaguruś

ītavijjalācchaḥ । tasyasnehācchleṣmalāḥ

snigdhāṅgāḥślakṣṇatvācchlakṣṇāṅgāḥ

mṛdutvāddrṣṭisukhasukumārāvadātagātrāḥmādhuryātpṛabhūtaśukr

avyavāyāpatyāḥ sārātvāt sārasānhatasthiraśarīrā

sāndratvādupacitaparipūrṇasarvāṅgāḥmandatvānmandaceṣṭāhāravy

āharāḥ staimityādaśīghrārambhakṣobhavikārāḥ

gurutvātsārādhiṣṭhitāvasthitagatayaḥśaityādālpakṣutṛṣṇāsantāpasve

dadoṣāḥ । vijjalatvāt suśliṣṭasārasandhibandhanāḥ tathā'cchatvāt

prasannadarśanānanāḥ prasannasniḡdhavarṇasvarāśca bhavanti ।

ta evaṅguṇayogācchleṣmalā balavanto vasumanto

vidyāvanta ojasvinaḥ śāntā āyuṣmantaśca bhavanti । ca vi 8/16

Kapha is unctuous, smooth, soft, sweet, firm, dense, slow, stable, heavy, cold, viscous and clear. Due to the unctuous quality of kapha the organs are smooth and unctuous. Due to the sweet quality there is increased semen, desire for sex and more number of procreation. Due to the firm quality one has firmness of mind. Due to slow quality, one is slow in action,

slow in intake of food and movement. Due to the stable quality one is low in initiating actions, getting irritated and morbid manifestations. Due to the cold quality there is lack of intensity of hunger, thirst, heat and perspiration. Due to clear quality, his face is clear and there is happiness in look and face.

2.2 Susruta samhita

सुश्रुत संहिता

सप्त प्रकृतयो भवन्ति दोषैः पृथक् द्विषः समस्तैश्च ।सु शा ४-६२

Sapta prakṛtayo bhavanti-- doṣaiḥ pṛthak dviṣaḥ samastaiśca ।su śā
4/62

शुक्रशोणितसंयोगे यो भवेद्दोषः उत्कटः ।

प्रकृतिर्जायते तेन तस्या मे लक्षणं श्रुणु ॥सु शा ४-६३

śukraśoṇitasamyoge yo bhaveddoṣaḥ utkaṭaḥ ।

prakṛti rjāyate tena tasyā me lakṣaṇaṁ śruṇu ॥su śā 4/63

Natural constitution is designed by the dosa which stays predominant during fertilization.

Characteristics of vātalā individuals:

तत्र यः प्रजागरूकः शीतद्वेषी दुर्भगः स्तेनो मत्सर्यनार्यो गान्धर्वचित्तः स्फुटितकरचरणो
अल्परूक्षश्मश्रुनखकेशः क्रोधी दन्त नखादि च भवति ॥

सु शा ४-६४

Tatra yaḥ prajāgarūkaḥ śīta-dveṣī durbhagaḥ steno matsaryanāryo
gāndharvacittaḥ sphuṭitakaracaraṇo
alparūkṣaśmaśrunakhakeśaḥ krodhī danta nakhādi ca bhavati ॥

(su śā 4/64)

अघृतिरदृढसौहृदः कृतघ्नः कृशपरुषो धमनीततः प्रलापी ।

द्रुतगतिरटनोऽनवस्थितात्मा वियदपि गच्छति सम्भ्रमेण सुप्तः ॥सु शा ४-६५

Adhṛtiradṛdhasauhrdaḥ kṛtaghnaḥ kṛśaparūṣo dhamanītataḥ pralāpī
drutagatiraṇano'navasthitātmā viyadapi gacchati sambhrameṇa
suptaḥ ॥su śā 4/65

अव्ययस्थितमतिश्चलदृष्टिर्मन्दरत्नधनसञ्जयमित्रः ।

किञ्चिदेव विलपत्यनिबध्दं मारुतप्रकृतिरेष मनुष्यः ॥सु शा ४-६६

Avyayasthitamatiścaladrṣṭirmanḍaratnadhanasañjayamitraḥ ।
Kiñcideva vilapatya nibadhdam mārutaprakṛtīreṣa manuṣyaḥ ॥
su śā 4/66

वातिकाश्चाजगोमायुशशाखूष्ट्रशुनां तथा ।

गृध्रकाकखरादीनामनूकैः कीर्तिता नराः ॥सु शा ४-६७

Vātikāścājagomāyusaśākhūṣṭraśunām tathā ।
Grḍhrakākakharādīnāmanūkaiḥ kīrtitā narāḥ ॥su śā 4/67

The person of vātika constitution is excessively wakeful, averse to cold, unlucky, thief, jealous, uncultured, music loving, wrathful. He is impatient with fickle friendship, ungrateful, talkative, fast moving, frequently traveling with unsteady mind. He has small collection of gems, wealth and few friends, he sometimes talks irrelevant, in dream he flies high in sky. Those having vātika constitution resemble in character of goat, jackal, rabbit, rat, camel, dog, vulture, crow, ass etc.

Characteristics of pittalā individual:

स्वेदनो दुर्गन्धः पीतशिथिलाङ्गस्ताम्रनखनयनतालुजिह्वौष्ठपाणिपादतलो
दुर्भगो वलीपलितखालित्यजुष्टो बहुभुगुष्णद्वेषी क्षिप्रकोपप्रसादो मध्यमबलो
मध्यायुश्च भवति । सु शा ४-६८

Svedano durgandhaḥ Pītaśithilāṅgastāmranakhanayanatālu
jihvauṣṭapāṇipādatalo
durbhago valīpalitakhālitijūṣṭo bahubhuguṣṇadveṣī
kṣiprakopaprasādo madhyamabalo madhyāyusca bhavati ।
su śā 4/68

मेधावी निपुणमतिर्विगृह्य वक्ता तेजस्वी समितिषु दुर्निवारवीर्यः ।

सुप्तः सन् कनकपलाशकर्णिकारान् संपश्येदपि च हुताशविद्युदुल्काः ॥सु शा ४- ६९
Medhāvī nipuṇamatirvigṛhya vaktā tejasvī samitiṣu durnivāravīryaḥ
suptaḥ san kanakapalāśakarṇikārān sampāśyedapi ca
hutaśavidyudulkāḥ ॥su śā 4 /69

न भयात् प्रणमेदनतेष्वमृदु प्रणतेष्वपि सान्त्वनदानरुचिः ।

भवतीह सदा व्यथितास्यगतिः स भवेदिह पित्तकृतप्रकृति ॥सु शा ४-७०
Na bhayāt praṇamedanateṣvamarṛdu praṇateṣvapi sāntvanadānaruciḥ
Bhavatīha sadā vyathitāsyagatiḥ sa bhavediha pittakṛta prakṛti ॥
su śā 4/70

भुजङ्गोलूकगन्धर्वयक्षमार्जारवानरैः ।

व्याघ्रर्क्षनकुलानूकैः पैत्तिकास्तु नराः स्मृताः ॥सु शा ४-७१
Bhujāṅgolūkagandharvayakṣamārajāravānaraiḥ ।
Vyāghrarkṣanakulānūkaiḥ paittikāstu narāḥ smṛtāḥ ॥su śā 4/71

The person of pitta constitution sweats profusely; he chats a lot.

He dislikes heat, becomes angry and he is short tempered. He has moderate strength and moderate life span. He is intelligent, sharp, contending debator, brilliant and of uncontrollable power in battles. In sleep he dreams of gold, flower of palāśa and kannikara, and also lightening and meteor. He never submits by fear, is harsh to rudes but compassionate and charitable to those submitted, frequently has troubles in mouth and difficult movement.

Those having pitta constitution resemble in character of snake, yakṣa, cat, monkey, tiger, bear and mangoose.

Characteristics of kaphajā individual

दूर्वेन्दीवरनिस्त्रिंशद्दरिष्टकशरकाण्डानामन्यतमवर्णः सुभगः प्रियदर्शनो मधुरप्रियः

कृतज्ञोधृतिमान् सहिष्णुरलोलुपो बलवांश्चिरग्राही दृढवैरश्च भवति ॥सु शा ४-७२

Dūrvendīvaranistrimśārdrarīṣṭakaśarakāṇḍānāmanyatamavarṇaḥ

subhagaḥPriyadarśano madhurapriyaḥ kṛtajñodhṛtimān

sahiṣṇuralolupoBalavāṁściragrāhī dṛḍhavairaśca bhavati |su śā 4/72

शुक्लाक्षः स्थिरकुटिलातिनीलकेशा लक्ष्मीवान् जलदमृदङ्गसिंहघोषः ।

सन् सकमलहंसचक्रवाकान् संपश्येदपि च जलाशयान् मनोज्ञान् ॥ सु शा ४- ७३

śuklākṣaḥ sthirakuṭilā tinīlake śā lakṣmīvān

Jaladamṛdaṅgasimhaghosaḥ |san sakamalahansaḥcakravākān

Sampaśyedapi ca jalāśayān manojñān || su śā 4 /73

रक्तान्तनेत्रः सुविभक्तगात्रः स्निग्धच्छवि सत्त्वगुणोपपन्नः ।

क्लेशक्षमो मानयिता गुरूणां ज्ञेयो बलासप्रकृतिर्मनुष्यः ।सु शा ४-७४

Raktāntanetraḥ suvibhaktagātraḥ snigdhaḥchavi
sattvaguṇopapannaḥ ।

Kleśakṣamo mānayatā gurūṇām jñeyo balāsaprakṛtirmanuṣyaḥ ।su śā
4/74

दृढशास्त्रमतिः स्थिरमित्रधनः परिगण्य चिरात् प्रददाति बहु ।

परिनिश्चितवाक्यपदः सततं गुरुमानकरश्च भवेत् सदा ॥सु शा ४-७५

Dr̥dhaśāstramatiḥ sthiramitradhanaḥ parigaṇya cirāt pradadāti bahu
Pariniścitavākyaḥ satataṁ gurumānakaśca bhavet sadā ॥su śā
4/75

ब्रह्मरुद्रेन्द्रवरुणैः सिंहाश्वगजगोवृषैः ।

तार्क्ष्यहंससमानूकाः श्लेष्मप्रकृतयो नराः ॥सु शा ४-७६

Brahmarudrendravarunaiḥ simhāśvagajagovṛṣaiḥ ।

Tārksyahaṁsasamānūkāḥ śleṣmaprakṛtayo narāḥ ॥su śā 4/76

The person of kaphaja constitution has sweet loving, grateful, patient tolerant, greedless, strong, with delayed aquasition and stable enmity. In dreams he experiences lotus, swan, cākṛavāka and beautiful lakes.

Kapha prakṛti person is having predominance of satva quality. He is tolerant to difficulties and respectful to teachers and elders. He is firm in scriptural knowledge and views with stable friends and wealth, donating plenty after long consideration, always clever in choosing sentences and words. He is respectful to teachers and elders.

2.3 Aṣṭāṅga hṛdayaḥ

अष्टाङ्ग हृदयः

तैश्च तिस्रः प्रकृतयो हीनमध्योत्तमाः पृथक् ।

समधातुः समस्तासु श्रेष्ठा निन्द्या द्विदोषजाः ॥अ ह सू ११०

Taiśca tisraḥ prakṛtayo hīnamadhyottamāḥ pṛthak ।

Samadhātuḥ samastāsu śreṣṭhā nindyā dvidoṣajāḥ ॥a hṛ sū 110

Dosas are present in śukra and ārtava at the time of commencement of life, there arises five kinds of prakṛti. Just as poisonous worms arise from poison, they are hīnamadhyottamā from each respectively. That the constitution arising from all of them is sama which is ideal. Those arising from two combination is nindyā.

शुक्रासृग्गर्भिणीभोज्यचेष्टागर्भाशयर्तुषु ।

यः स्याद्दोषोऽधिकस्तेन प्रकृतिः सप्तधोदिता ॥अ हु शा ३

śukrāsṛggarbhiṇībhojyaceṣṭāgarbhāśayartuṣu ।

Yaḥ syāddoṣo'dhikastena prakṛtiḥ saptadhoditā ॥a hru śā 3

When the time of conception the dosa predominant in śukra and śoṇita and the doṣa predominant in the food of mother during pregnancy will result in the prakṛti of the child.

वात प्रकृति

Vāta prakṛti

प्रायोऽत एव पवनाध्युषिता मनुष्या दोषात्मकाः स्फुटितधूसरकेशगात्राः ।

शीतद्विषश्चलघृतिस्मृतिबुद्धिचेष्टा सौहार्ददृष्टिगतयोऽतिबहुप्रलापाः ॥

अ ह अ ३-८५

rāyo'ta eva pavanādhyuṣitā manuṣyā ।
doṣātmakāḥ sphuṭitadhūsarakeśagātrāḥ ।
śītadvīṣaścaladhṛtismṛtibuddhiceṣṭā ।
suhārdadrṣṭigatayo'tibahupralāpāḥ ॥ a hr a 3/85

अल्पवित्तबलजीवितनिद्राः सन्नसक्तचलजर्जरवाचः ।

नास्तिका बहुभुजः सविलासा गीतहासमृगयाकलिलोलाः ॥ अ ह ३-८

Alpavittabalajīvitānidrāḥ sannasaktacalajarjavācaḥ ।
Nāstikā bahubhujāḥ savilāsā gītahāsamṛgayākalilolāḥ ॥ a hr 3/86

मधुराम्लपटूष्णसात्म्य काङ्क्षाः कृशदीर्घाकृतयः सशब्दयाताः ।

न दृढ जितेन्द्रिया न चार्या न कान्तादयिता बहुप्रजा वा ॥ अ ह अ ३-८७

Madhurāmlapaṭūṣṇasātmya kāṅkṣāḥ kṛśadīrghākṛtayāḥ
saśabdayātāḥ ।

NaDṛḍha jītendriyā na cāryā na kāntādayitā bahuprajā vā ॥

a hr a 3 /87

नेत्राणि चैषां खरधूसराणि वृत्तन्यचारूणि मृतोपमानि ।

उन्मीलितानीव भवन्ति सुप्ते शैलाद्रुमांस्ते गगनं च यान्ति ॥अ ह शा ३-८८

Netrāṇi caiṣāṃ kharadhūsarāṇi vṛttanyacārūṇi mṛtopamāni ।

Unmīlitānīva bhavanti supṭe śailādrumāṁste gaganam ca yānti ॥

a hr śā 3/88

अधन्या मत्सराध्माताः स्तेनाः प्रोद्धपिण्डिकाः ।

श्वश्रुगालोष्ट्रगृध्राखुकाकानूकाश्च वातिकाः ॥अ ह शा अ३-८९

Adhanyā matsarādhmātāḥ stenāḥ prodbaddhapiṇḍikāḥ ।
śvaśrugāloṣṭragṛdhrākhukākānūkāśca vātikāḥ ॥a hr śā a3/89

Because of all pervading quality of vāta it is quick acting, strong, tendency to aggravate others (doṣa, dhātu and mala), acting independently and producing many diseases vata is powerful among doṣas. Hence the person born with the predominance of doṣa hate cold, they are unsteady with respect of courage, memory, thinking, friendship, talk more and irrelevant, possess little of wealth, strength, span of life and sleep. They are atheists, gluttons, pleasure seeking, desirous of music, humour, hunting or gambling, desirous of sweet, sour and salty foods, are steadfast, cannot control senses, not liked by women, not many issues. They sleep with the lids half open, they dream as though roaming on mountains, dwelling on trees, and moving on sky. Persons of vāta prakṛti are nonmagnanimous, bloated with jealousy, of stealing nature. They resemble in the mental behaviour of animals like jackal, dog, camel ,vulture, rat and crow.

पित्त प्रकृति

Pitta prakṛti

पित्तं वन्निर्वन्हजं वा यदस्मात् पित्तोद्विक्तस्तीक्ष्णतृष्णाबुभुक्षः ।

गौरोष्णाङ्गस्ताम्रहस्ताङ्घ्रवक्रः शूरो मानी पिङ्गकेशोऽल्परोमा ॥ अ ह शा ३ ९०

Pittaṁ vanhirva nha jaṁ vā yadasmāt
ittodriktastikṣṇatrṣṇābubhuksaḥ ।
Gauroṣṇāṅgastāmrahasṭāṅghravaktraḥ śūro mānī piṅgakeśo'lparomā
॥ a hr śā 3 /90

दयितमाल्यविलेपनमण्डनः सुचरितः शुचिराश्रितवत्सलः ।

विभवसाहसबुद्धिबलान्वितो भवति भीषु गतिर्द्विषतामपि ॥ अ ह शा ३ ९१

Dayitamālyavilepanamaṇḍanaḥ sucariṭaḥ śucirāśritavatsalaḥ ।
Vibhavasāhasabuddhibalānvito bhavati bhīṣu gatirdviṣatāmapi ॥
a hr śā 3 /91

मेधावी प्रशिथिलसन्धिबन्धमांसो नारीणामनभिमतोऽल्पशुक्रकामः ।

आवासः पलिततरङ्गनीलिकानां भुङ्क्तेऽन्नं मधुरकषायतिक्तशीतम् । अ ह शा ३ ९२

Medhāvī praśithilasandhibandhamāṁso
Nārīṇāmanabhimato'lpaśukrakāmaḥ ।
āvāsaḥ palitatarāṅganīlikānām bhun̄kte'nnam
Madhurakaṣāyatiktaśītam । a hr śā 3 /92

धर्मद्वेषी स्वेदनः पूतिगन्धिर्भयुच्चारक्रोधपानाशनेर्ष्यः ।

सुप्तः पशेत्कर्णिकारान्पलाशान् दिग्दाहोल्काविद्युदार्कानलांश्च ॥ अ ह शा ३ ९३

Dharmadveṣī svedanaḥ
Pūtigandhirbharyuccāarakrodhapānāśanersyaḥ ।
Suptaḥ paśetkarṇikārānpalāśān digdāholkāvidyudarkānalāṁśca ॥
a hr śā 3 /93

तनूनि पिङ्गानि चलानि चैषां तन्वल्पपक्ष्माणि हिमप्रियाणि ।

क्रोधेन मद्येन रवेश्च भासा रागं व्रजन्त्याशु विलोचनानि । अ ह शा ३ ९४

Tanūni piṅgāni calāni caiṣāṁ tanvalpapakṣmāṇi himapriyāṇi ।
Krodhena madyena raveśca bhāsā rāgaṁ vrajantyāśu vilocanāni ।
a hr śā 3 /94

मध्यायुषो मध्यबलाः पण्डिताः क्लेशभीरवः

व्याघ्रर्क्षकपिमाज्जरयक्षानूकाश्च पैत्तिकाः ॥ अ ह शा ३ ९५

Madhyāyūṣo madhyabalāḥ paṇḍitāḥ kleśabhīravāḥ

Vyāghrarkṣakapimārjārayakṣānūkāśca paittikāḥ ॥ A hr śā 3 /95

Pitta is fire itself or born of fire. Hence persons having predominance of pitta have very severe thirst and hunger. They are brave and proud of themselves. They are fond of women, garland and perfumes. They are of good behaviour and clean. They are affectionate to dependents, desirous of adventures. They have the mental power of facing fear and enmity. They are highly intelligent. They like the food which is astringent, bitter and sweet. They like cool places and hate sunlight and heat. They perspire heavily and smell a lot due to that expel faeces frequently, have more anger, hate and jealousy. While in sleep they dream of flowers of kannikara and palāśa, forest, fire, meteor, lightning/ thunderbolt, bright sunrays and fire. Persons of this nature are of medium life span, medium strength, highly learned, afraid of discomfort and resemble in mental behavior of animals like tiger, bear, ape, cat and yakṣa.

कफ प्रकृति

Kapha prakrti

श्लेष्मा सोमः श्लेष्मलस्तेन सौम्यो गूढस्निग्धश्छिष्टसन्ध्यस्थिमांसः ।

क्षुत्तुड्दुःखक्लेशघर्मोरतप्यो बुद्ध्या सात्त्विकः सत्यसन्धः ॥ अ ह शा ३ ९६
śleṣmā somah śleṣmalastena saumyo Gūḍhasnigdhaśli
ṣṭasandhyasthimāmsah
Kṣu tṭṛḍduḥkhakleśagharmoratapyo buddhyā sāttvikaḥ
Satyasandhaḥ ॥ a hṛ śā 3 /96

प्रियङ्गुदूर्वाशरकाण्डशस्त्रगोरोचनापद्मसुवर्णवर्णः ।

प्रलम्बबाहुः पृथुपीनवक्षा महाललाटाघननीललेशः ॥ अ ह शा ३ ९७
Priyaṅgudūrvāśarakāṇḍaśastragorocanāpadmasuvarṇavarṇah |
Pralambabāhuḥ pṛṭhupīnavakṣā mahālalāto ghananilaleśah ||
a hṛ śā 3 /97

मृद्वङ्गः समसुविभक्तचारुदेहो वह्नेजोरतिरसशुक्रपुत्रभृत्यः ।

धर्मात्मा वदति न निष्ठुरं च जातु प्रचन्नं वहति द्रुढं चिरं च वैरं ॥ अ ह शा ३ ९८
Mr̥dvaṅgaḥ samasuvibhaktacārudeho
Vahvojoratirasaśukraputrabhṛtyah |
Dharmātmā vadati na niṣṭhuraṁ ca jātu praccannaṁ vahati druḍhaṁ
Ciraṁ ca vairam || a hṛ śā 3 /98

समदद्विरद्रेन्द्रतुल्ययातो जलदाम्भोधिमृद्वङ्गसिंहघोषः ।

स्मृतिमानभियोगवान् विनीतो न च बाल्योऽप्यतिरोदनो न लोलः ॥

अ ह शा ३ ९९

Samadadviradrendratulyayāto
Jaladāmbhodhimṛdvaṅgasimhaghōṣah |
Smṛtimānabhiyogavān vinīto na ca bālyo'pyatirodano na lolah ||
a hṛ śā 3 /99

तिक्तं कषायंकटुकोष्णरूक्षमल्पं स भुङ्क्ते बलवांस्थथाऽपि ।

रक्तान्तसुस्निग्धविशालदीर्घसुव्यक्तशुक्लासितपक्षमलाक्षः ॥ अ ह शा ३ १००

Tiktaṁ kaṣāyaṅ kaṭukoṣṇarūkṣamalpaṁ sa bhuṅkte
Balavāṁsthathā'pi |
Raktāntasusnigdhaveśāladīrghasuvyaktaśuklāsitaṅpakṣmalākṣaḥ ||
a hr śā 3 /100

अल्पव्याहारक्रोधपानाशनेहः प्राज्यायुर्वित्तो दीर्घदर्शी वदान्यः ।

श्राद्धो गम्भीरः स्थूललक्षः क्षमावानार्यो निद्रालुदीर्घसूत्रः कृतज्ञः । अ ह शा ३ १०१

Alpavyāhārakrodhapānāśanehaḥ prājyāyurvitto dīrghadarśī
vadānyaḥ |
śrāddo gambhīraḥ sthūlalakṣaḥ kṣamāvānāryo nidrāludīrghasūtraḥ
kṛtajñaḥ | a hr śā 3 /101

ऋजुर्विपश्चित्सुभगः सुलज्जो भक्तो गुरूणां स्थिरसौहृदश्च ।

स्वप्नो सपद्मान् सविहङ्गमालांस्तोयाशयान् पश्यति तोयदंश्च ॥ अ ह शा ३ १०२

ṛjurvipaścitsubhagaḥ sulajjo bhakto gurūṅāṁ sthīrasauhr̥daśca |
Svapno sapadmān savīhaṅgamālāṁstoyāśayān paśyati toyadaṁśca
|| a hr śā 3 /102

ब्रम्हरुद्रेन्द्रवरुणतार्क्ष्यहंसगजाधिपैः ।

श्लेष्मप्रकृतयस्तुल्यास्तथा सिंहाश्वगोवृषैः ॥ अ ह शा ३ १०३

Bramharudrendravaruṇatārksyahaṁsagajādhipaiḥ |
śleṣmaprakṛtayastulyāstathā śinhāśvagovṛṣaiḥ || a hr śā 3 /103

śleṣma is sama, hence the persons of kapha prakṛti are mild in nature. They are not much troubled by hunger, thirst, unhappiness, strain and heat. They are endowed with intelligence, right attitude and truthfulness.. they are of great vigour and sexual prowess. They have more semen and

more issues. They are of righteous and benovelant nature. They do not speak harsh and abusive. They have good memory, perseverance, humbleness, they do not repent much, they are not greedy. They like the foods which are bitter, astringent, pungent, hot, dry and less in quantity and still remain strong. They speak less, less anger, less desire to drink, food and activities. They are endowed with more life, wealth, foresight, have faith in God, dignified, greatly charitable, of forgiving nature, civilized. They sleep a lot, drowsy, slow, grateful, straightforward, learned, bashful, obedient to teachers and elders, friends, in dreams they see reservoirs full of water, full of lotus and rows of birds and clouds. Persons of śleṣma prakṛti are similar in nature with brahmā, rudra, indra, varuṇa, garuḍa, haṁsa, gajādhīpa, lion, horse and bull.

2.4 śāraṅgadhara saṁhitā

शारङ्गधर संहिता

अल्पकेशः कृशा रूक्षो वाचालश्चलमानसः ।

आकाशचारी स्वप्नेषु वात प्रकृतिको नरः ॥ शा सं २१

Alpakeśaḥ kṛśo rūkṣo vācālaścalamānasaḥ ।

ākāśacārī Svapneṣu vāta prakṛtiko naraḥ ॥ śā saṁ 21

Persons of vāta prakṛti are very talkative, of unsteady mind, in sleep they dream of moving in air.

अकालपलितैः व्याप्तो धीमान् स्वेदी च ऐषणः ।

स्वप्नेषज्योतिणां दृष्टा पित्तप्रकृतिकोनरः ॥ शा सं २२

Akālapolitaiḥ vyāpto dhīmān svedī ca aiṣaṇaḥ ।

svapneṣujyotiṇāṃ dṛṣṭā pittaprakṛtiko naraḥ ॥śā saṃ 22

Persons of pitta prakṛti are very intelligent, very angry, sweat profusely and see fire in dreams.

गम्भीरबुद्धिः स्थूलाङ्ग स्निग्धकेशो महाबलः ।

स्वप्नजलाषयालोकी श्लेष्मप्रकृतिको नरः ॥ सा सं २३

Gambhīrabuddhiḥ sthūlāṅga snigdhaśo mahābalaḥ ।

svapnejalāṣayālokī śleṣmaprakṛtiko naraḥ ॥sā saṃ 23

Persons of kapha prakṛti are steady in mind, in sleep they dream of reservoirs of water.

2.5 Yoga Ratnākara

योग रत्नाकर

अधृतिरदृढसौहृदः कृतघ्न कृशपरुषो धमनीततः प्रलापी ।

द्रुतगतिरटनोऽनवस्थितात्मा वियति च गच्छति संभ्रमेण सुप्तः ॥ १ ॥

Adhṛutiradr̥ḥasauhr̥daḥ kṛtaghna kṛśaparauṣo dhamanītataḥ pralāpī
Drutagatiraṭano'navasthitātmā viyati ca gacchati sambhramaṇa
suptaḥ ||1 ||

अव्यवस्थितमतिश्चलदृष्टिर्मन्दरत्न धनसन्जयमित्रः

किञ्चिदेव विलपत्यनिबद्धं मरुतप्रकृतिरेष मनुष्यः ॥२ ॥

avyavasthitamatiścaladr̥ṣṭirmandaratna dhanasanjayamitraḥ
kiñcideva vilapatyanibaddam marutaprakṛtiresa manuṣyaḥ ||2||

The lakṣaṇa of vāta prakṛti person are one who is coward, no steady friendship, one who is not thankful, one who speaks harsh and speaks more, one who has unsteady mind and wanders more, one who dreams of flying in sky, flickering mind, unsteady vision, one who has less wealth, money and friends.

पित्त प्रकृति

pitta prakṛti

मेधावीनिपुणमतिः प्रगल्भवक्ता तेजस्वी समितिषु दुर्निवारवीर्यः ।

सुप्तः सन्कनकपलाशकर्णिकारान् संपश्येदपि च हुताशविद्युदुल्काः ॥३ ॥

Medhāvīnipuṇamatiḥ pragalbhavaktā tejasvī samitiṣu

Durnivāravīryaḥ |suptaḥ sankanakapalāśakarṇikārān sampaśyedapi
Ca hutāśavidyudulkāḥ ||3 ||

न भयात्प्रणमेदनतेष्वमृदुः प्रणतेष्वपि सान्त्वनदानपरः

भवतीह सदा व्यथितास्यगतिः स भवेदिह पित्तमय प्रकृतिः ।

na bhayātpraṇamedanateṣvamṛduḥ praṇateṣvapi

sāntvanadānaparaḥ |

bhavatīha sadā vyathitāsyagatiḥ sa bhavediha pittamaya prakṛtiḥ |4|

The lakṣaṇa of pitta prakṛti person are one who is intelligent, clever, speaks less, bright, one who eradicates evil in society. In sleep he dreams of gold, flowers of palāśa, kanera, fire, thunderbolt, meteor. One who faces the z tough situations bravely, one who is not soft towards wicked people, one who is kind towards sick and afraid of misery

कफ प्रकृति

kapha prakṛti

शुक्लाक्षः स्थिरकुटिलालिनीलकेशो लक्ष्मीवाञ्जलदमृदङ्गसिंहघोषः ।

सुप्तः सन्सकमलहंसचक्रवाकान् संपश्येदपि च जलाशयान्मनोज्ञान् ।५।।

śuklākṣaḥsthirakuṭilālinīlakeśolakṣmīvāñjaladamṛdaṅgasimhaghoṣḥ
Suptaḥ sansakamalahamsacakravākān sampas̥yedapi ca
jalāśayānmanojñān ।5।।

रक्तान्तनेत्रः सुविभक्तगात्रः स्निग्धच्छविः सत्त्वगुणोपपन्नः ।

क्लेशक्षमो मानयिता गुरूणां ज्ञेयो बलासप्रकृतिर्मनुष्यः ॥

Raktāntanetraḥ suvibhaktagātraḥ
snigdhaçchaviḥsattvaguṇopapannaḥ ।

Kleśakṣamo mānayitā gurūṇāṃ jñeyo balāsaprakṛtirmanuṣyaḥ ॥6।।

The laxanas of kapha prakṛti persons are one who is rich, one's voice is of the sound of cloud, mṛdaṅga and simha, in sleep one dreams of lotus, haṁsa, cāravāka and beautiful lake, one having sattva guṇa, one who is resistant to misery, giving respect to wellknown people and elders.

द्वयोर्वा तिसृणां वापि प्रकृतीनां तु लक्षणैः ।

ज्ञात्वा संसर्गजा वैद्यः प्रकृतीरभिदर्शयेत् ॥७॥

Dvayorvā tistrṇām vāpi prakṛtīnām tu lakṣaṇaiḥ |
Jñātvā saṁsargajā vaidyaḥ prakṛtirabhidarśayet ||7 ||

When two doṣas are predominant in a person then they are saṁsargajā and when three doṣas are equal then it is tridoṣajā prakṛti.

विषजातो तथा कीटो न विषेण विपद्यते ।

तद्वत्प्रकृतयो मर्त्यं शक्नुवन्ति न बाधितुम् ॥८॥

Viṣajāto tathā kīṭo na viṣeṇa vipadyate |
Tadvatprakṛtayo martya śaknuvanti na bādhitum ||8 ||

Just as the insect born of poisonous material is not influenced by the poison similarly the particular doṣa which is predominant in a person does not harm that person.

2.6 Hārīta saṁhitā

हारीत संहिता

वात प्रकृति

Vāta prakṛti

यः कृष्णवर्णश्चपलोऽतिसूक्ष्मः केशाल्परूक्षो बलवान् क्षमः स्यात् ।

सूक्ष्मातिदन्तो नखवृद्धिमिति दीर्घस्वनश्चङ्क्रमणक्षमोऽसौ ॥

Yaḥ kṛṣṇavarṇaścapalo'tisūkṣmaḥ keśālparūkṣo balavān kṣamaḥ syāt
|Sūkṣmātidanto nakhavṛddimeti dīrghasvanaścaṅkramaṇakṣamo'sau
||

दीर्घक्रमो लोलुपहीनसत्त्वस्तथैव चाम्लीरस भोजनेच्छुः ।

संस्वेदनेनाति विमर्दनेन सौख्यं समागच्छति वातलो नरः ॥ हा प्र अ ५- १७ ३८

Dīrghakramo lolupahīnasattvastathaiva cāmlīrasa bhojanecchuḥ |
Saṁsvedanenāti vimardanena saukhyaṁ samāgacchati vātalo naraḥ
|| hā pra a 5/ 17&38

The person of this nature is active, very sharp mind, strong, able, loud and deep voice and wanderer. He likes to eat amla rasa and sweets. He is not greedy and will have happiness.

पित्त प्रकृति

Pitta prakṛti

गौरातिपिङ्ग सुकुमारमूर्तिः प्रीतः सुशीते मधुपिङ्गनेत्रः ।

तीक्ष्णोऽपि कोपीक्षणभङ्गुरश्च त्रासी मृदुगात्रमलोमकं स्यात् ॥हा प्र अ ५ १९

Gaurātipiṅga sukumāramūrtiḥ prītaḥ suśīte madhupiṅganetraḥ |
Tīkṣṇo'pi kopīkṣaṇabhaṅguraśca trāsī mṛdugātramalomakam syāt
||hā pra a 5 /19

लौल्यप्रियस्तित्तरसानुभोजी द्वेषी च तीक्ष्णे च नवोष्णसेवी ।

स्तुतिप्रियो दन्तविशुद्धवर्णो जातः स पित्तप्रकृतिर्मनुष्यः ॥हा प्र अ ५- २०

Laulyapriyastiktarasānubhojī dveṣī ca tīkṣṇe ca navoṣṇasevī |
Stutipriyo dantaviśuddhavarṇo jātaḥ sa pittaprakṛtirmanuṣyaḥ ||

The persons of this nature are very sensitive, likes cold region, very sharp, short tempered and the anger vanishes in few minutes. They are fearful in nature.

कफ प्रकृति

kapha prakṛti

सुस्निग्धवर्णः सितनेत्र तृप्तः श्यामः सुकेशो नखदीर्घरोमा ।

गम्भीरशब्दः श्रुतिशास्त्रनिद्रा तन्द्राप्रीयस्तिक्त कटूष्ण भोजी ॥

हा संहित प्रथम स्थान ५ २१

Susnigdhavarnaḥ sitanetra tṛptaḥ śyāmaḥ sukeśo nakhadīrgharomā ।
Gambhīraśabdaḥ śrutiśāstranidrā tandrāpriyastikta kaṭūṣṇa bhojī ॥

Hā saṁhita prathama sthāna 5/ 21

स मांसलः स्निग्धरसप्रियश्च सङ्गीतवाद्योऽतिसहिष्णुशीलः ।

व्यायमशीलो रतिलालसोऽसौ भवेत्कफस्य प्रकृतिर्मनुषयः ॥

हा संहित प्रथम स्थान ५ २२

Sa māṁsalaḥ snigdharasapriyaśca saṅgītavādhyo'tisahiṣṇuśīlaḥ ।
Vyāyamaśīlo ratilālaso'sau bhavetkaphasya prakṛtirmanuṣayaḥ ॥
Hā saṁhita prathama sthāna 5/ 22

The persons of this nature are contended, deep voice, likes to listen to scriptures. They sleep more and are lazy, likes bitter and hot food. They like sweet and fatty food, listen to music and are very tolerant in nature. They

would like to work hard and be happy.

SUMMARY AND CONCLUSION

Caraka, Sushruta and Vagbhata explain ahara, vihara and vicara of vata, pitta and kapha as follows.

- *Vata prakrti* - less sleep, awake most of the time, inconsistent in his action, food and movement, mind is very unstable, talkative, quick in initiating actions, irritated and onset of morbid manifestation, quick in affliction with fear, quick in likes and dislikes, quick in understanding things and forgetting, intolerant for cold things and often gets afflicted with cold, shivering and stiffness.
- *Pitta prakrti* - intolerant of hot things, having hot face, excessive hunger and thirst, sharp physical strength, strong digestive power, intake of food and drink in large quantities, inability to face difficult situations and glutton habits. One voids the stools and urine in large quantities and even sweats a lot. There is insufficiency of semen, sexual desire and procreation.
- *Kapha prakrti* - firmness of mind, slow in action, slow in intake of food and movement, low in initiating actions, getting irritated and morbid manifestations. There is lack of intensity of hunger, thirst, heat and perspiration.
- Contribution of study - There are several books in English language by contemporary writers (Subodha, Chopras, Kasture,) about ahara, vihara and vichara according to Ayurveda. All of them have taken references only from one or two traditional texts. The present study has referred all available literature (Major and minor) from traditional texts and hence it is more comprehensive material.

BIBLIOGRAPHY

- 1) Arora D. Kumar, M. (2003). *Food allergies-leads from Ayurveda*. Indian J med sci, 57(2): 59-63.
- 2) Athavale V. B (2004). *Basic principles of ayurveda*. Delhi, India Choukambha Sanskrit prathisthan.
- 3) Bhushan P, Kalpana J, Aravind C. (2005). *Classification of human population based on HLA gene polymorphism and the concept of prakriti in Ayurveda* Altern complement med 11(2):349-53.
- 4) Chopra D. (1994). *Positive health*. New York, America. Crown publishers.
- 5) Dash B, Sharma, R.K. (1995). *Caraka Samhita*. Varanasi, India. Chowkamba Sanskrit series office.
- 6) Kasture H. (1997). *Practical aspect of prakriti*. Gandhinagar, India Choukambha Sanskrit series office.
- 7) Shastry K.A. (1997). *Sushruta samhita*. Varanasi, India. Chowkambha Sanskrit samsthana.

PART-2

EXPERIMENTAL RESEARCH

**DEVELOPMENT OF DHANVANTARI PERSONALITY
INVENTORY BASED ON tridoṣa WITH RESPECT TO āhāra, vihāra
and vicāra**

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ABSTRACT

Personality is defined as a deeply ingrained pattern of behavior that includes mode of perception relating to and thinking about once self and the surrounding environment. There are many ways of understanding and interpreting these characteristics and from time to time many scholars tried to define them. Theories, speculations and hypothesis are developed all over the world, defining and assessing human behavior in terms of his unique trails and types. Ayurveda emphasizes the assessment and categorization of prakrti of a person which reflects the functioning of the body, before the examination of any disease condition and it is possible to avoid sickness with promotion of positive well being along with adoption of suitable ways of life and food habits for particular seasons. The present study was aimed at developing a questionnaire for the assessment of prakrti of a person with respect to āhāra, vihāra and vicāra. Even though there are many questionnaires, none of them have been standardized. A systematic study to validate these has not been published. The present questionnaire was developed according to the āyurvedic scriptures and was studied on school students of both the sexes, aged between 10 to 17 years. A total of 350 students were involved for the test validation and 100 students for test retest for reliability after ten days. 35 students were subjected to individual clinical assessment by experienced Ayurveda physicians for validity. The data was analyzed using SPSS version. The results showed a strong cross validity for the questionnaire at $r=1.0$ at 0.001 level with physician diagnosing criteria and a reliability co-efficient of 0.913 after using both split-half and Spearman co-efficient tests. The results hence have shown that the questionnaire stands valid and reliable under the present boundaries of study.

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CHAPTER 1

INTRODUCTION

Human being is a social animal and he is also a product of social circumstances. Society influences his life. He also influences the society. In the process of the interaction between human and society, a kind of characteristics emerge in man, which can be considered as his way of behaviour and subsequently that becomes the pattern of his life which is called personality. There are many ways of understanding and interpreting these characteristics and from time to time many scholars tried to define them.

Theories, speculations and hypothesis are developed all over the world, defining and assessing human behaviour in terms of his unique traits and types. According to Allport's definition "personality is the dynamic organization within the individual of those psychophysical systems that determine his unique adjustments to his environment". (Allport-1937) Personality, thus according to this definition includes three aspects of an individual, the psychological, the biological and environmental aspects of an individual. The personality is also defined as "the sum total of characters that differentiate people, the stability in a person's behavior across different situations" (Feldman SR 1996.) Personality encompasses the relatively enduring, characteristics that differentiate people which make each of us unique. It is also personality that leads us to act in a consistent and predictable manner both in different situations and over extended period of time.

The biological aspects consisting of genetic, neurophysiologic, neurochemical and neurochronological components predispose the individual for a particular behavior that she/he may exhibit. This in

interaction with socio-cultural components that is learning, language, religion and society as a whole influence the development of personality (Bronn 1954). Since personality develops in the context of the society it is beneficial to note and understand it through the ideas put forth in each culture in the form of scientific and empirical studies. In the West, various viewpoints have been put forth by different scholars with reference to the concept of personality. In the East there are rich sources of psychological knowledge in the religious texts and practices and Indian sciences like Yoga and Ayurveda. Yoga and Ayurveda view that the creation of personality does not lie in only physical expression but also in the unification of mind. Ayurvedic and other Indian thinkers view that, human personality also can be expressed through his/her likes and dislikes of food, its quantity and taste, one's thought and actions also.

Ayurveda presents the personality as “prakṛti”, a saṁskṛta word. That means “nature” or natural form of constitution of body. It consists of two syllables “pra” and “kṛti”. “pra” when used as a prefix to verbs, it means “forward” or “forth” or “onward”, “before,” or in front. With adjectives it may vary excessively and with nouns it means beginning, commencement, source of origin. The syllable “kṛti” means manufacturing, “creation”, performing and is derived from the root “kṛ” which means to “perform” or to “form” or to “arrange” etc. Therefore they jointly mean “natural form” or the status, the original source. When a man is in his original state without change in the anatomy or physiological functions, and is in good health he may be said to be in his prakṛti state. The word “vikṛti” is used as the opposite of prakṛti which means “unnatural form”, “sickness”

changed from his original state. Ayurveda emphasizes the assessment of prakṛti state of a person before the examination of the disease condition, because if we know the original way of functioning or the state of the body, it is very easy to guide the patient to avoid sickness or possible derangements and also help him to promote positive health by suitable way of life and food habits for particular seasons. By knowing prakṛti one can also get advice for suitable profession and a suitable partner too.

Ayurveda has described ten types of examining a patient to come to diagnosis of the problem. The prakṛti examination is the first among them. The experts in modern science want to know what type of disease a patient is suffering from; on the contrary the expert in Ayurveda wants to know what type of person is suffering from the disease. If we know the type of original nature or personality it's very easy to know about the disease and treatment. Prakṛti is mainly divided into two main types: deha prakṛti and mānasika prakṛti. Deha prakṛti is of 7 types, vāta, pitta, kapha, vāta – pitta, vāta – kapha, pitta-kapha and vāta –pitta-kapha prakṛti. Prakṛti is formed in the womb of the mother at the time of conception and is also affected by the doṣa predominant in foetal circulation.

a) Sukra śonita

Sukra means sperm and Sonita means ovum. Prakṛti is also formed according to the dominant doṣas in the sperm and ovum at the time of conception. That is, the type of personality or prakṛti is determined by heredity factors in sperm and ovum. Caraka has described bīja and bīja bhāga, a term similar to genes. He describes that these carry information to

create some of the similar properties in the offspring, such as similarity of complexion, eyes, voice etc.

b) *Kāla garbhāśaya*

Kāla means time. Garbhāśaya means uterus. The condition of the uterus at the time of conception has great influence in the formation of prakṛti. The uterus may be vitiated by vāta, pitta and kapha as well as rajas and tamas. Prakṛti may be formed according to excess of one of these doṣas in the uterus of the mother.

c) *Mātr āhāra vihāra*

The diet taken by the mother and her behavior during pregnancy serves to increase or decrease a particular doṣa. Therefore, some changes in the fetus are possible after by influence of the uterine doṣa at the time of conception.

d) *Mahābhūta vikāra*

Pañca mahābhūta which are predominant during conception also play a key role in formation of prakṛti.

CHAPTER 2

LITERATURE REVIEW

The review of literature which is given here limits its scope to the assessment of personality through major tools and techniques available in global scene. Unfortunately there are not much researched tools based on traditional thoughts in India. Therefore, theoretical and philosophical principles suggesting human personality as described in modern psychology have been included here.

The literature is reviewed on following headings

- 2.1. Western theories of personality
- 2.2. Assessment of personality based on western concepts
- 2.3. Theories of personality in India
- 2.3. Assessment of Personality based on Indian concepts
- 2.4. Assessment of personality based on ayurvedic concepts

2.1 Western Theories

There are many theories, which postulated the types of personality. They are:

a) Hippocrates in 400 BC classified people on the basis of the four bodily humours namely blood, phlegm, black bile and yellow bile

1. Sigmund Freud (1856-1939) described three types of personality: structural, dynamic and psychosexual. Structural aspect consists of – id, ego, super ego; the dynamic personality contains conscious, unconscious and defense mechanisms; the psychosexual aspect is understood in terms of the development and behavior in five

subsequent stages of life (Infancy, childhood, adolescence, adult and senile).

2. Jung (1928) gave his theory based on the concepts of extraversion, introversion and four differentiated mental functions i.e., sensation, thinking, feeling and intuition in understanding personality.
3. Adler, contemporary of Jung, in his theory included the concepts of inferiority complex, style of life and birth order in the formation of personality.
4. Hall & Lindzey in 1957 involved socio – cultural and interpersonal aspects in their theory of personality.
5. Sheldon and Kretamber, classified personality on the basis of physique.
6. Eretscgmer classified people as ‘Pyknic’ who are fat and short, ‘Asthenic’ who are bony and lean, and ‘athletic’ who are muscular.
7. Sheldon found more complex and valid personality. He found relationship between body build and temperament. He classified individuals into endomorphic, mesomorphic and ectomorphic personality types.
8. Allport (1937) mentioned cardinal, central, and secondary types.
9. Models of personality advocated by Dollard and Miller (1959), Skinner (1935), Bandura (1963) and Moowrer (1950) emphasized the role of early learning experiences and conditioning, that influence the development of a personality.
10. Rogers (1947) and Maslow (1954) lay their stress upon feeling and beliefs with regard to self that should be given importance while understanding his personality.

11. Cattell, has given a mathematical model of personality and developed the questionnaire called 16 PFQ personality questionnaire.
12. Eysenck had identified these dimensions of personality, introversion, extroversion and neurotism; he also developed a questionnaire called Eysenck's personality inventory (EPI).

2.2 Assessment of personality based on modern concepts

Many of the above theories have led to development of different assessment tools for better understanding of personality. They include inventories, observational and projective methods, which are psychological, measures of perception and judgment.

2.2.1 Self-rating inventories

a. Inventories:

These contain items to be answered as true, false or cannot say. The items cover many different areas. It has 4 validity scales in addition. This inventory is used as an item tool for development of many other scales.

16PFQ

Self-rating inventory is that of Cattell 1950 ie 16 PFQ – 16 personality factor questionnaire. The inventory has sixteen personality factors.

The other inventories are EPI (Eysenck personality inventory), Bell's adjustment inventory (1962) and California personality inventory.

b. Observational methods: these are those in which an individual (teacher, parent, friend) is asked to describe some one else (student or children). The different observational situations are interviews, tests behavioral tests and personal perceptions.

c. Projective techniques:

The projective techniques are based on the hypothesis that an individual's response to a structured stimulus is influenced by his/her needs, motives, fears, expectations, and concerns. They are

Rorschach ink blot test, (1921)

Thematic apperception Test (TAT) by Murray and Moray

Rosenz Weigh Picture frustration study RWPF (1948)

World association Test by kent and Roseman (1910)

Sentence completion test (Sucks 1930)

d. Physiological measures: these include physique, blood chemistry and autonomic functioning, regulatory process (Brass functioning). Sheldon hurd (1929) developed a scale for temperament based on body build.

e. Perceptions and judgment: Visual occult field dependence, categorical behavior, normal response of eyes.

All these assessment techniques have originated in the west. Some of these techniques have been adapted to Indian conditions. MMPI (Multiphase questionnaire) has been validated by Indian conditions by Murthy (1975). TAT has the Indian version developed by Uma Choudary (1975)

2.3 Theories of personality in Indian scriptures

a. Personality in Vedas

The first reference about the concept of personality is available in the oldest Indian scripture called Vedas. According to these tests the essence of human personality is Atman. Atman in conjunction with gross and subtle bodies becomes subject to experience of pleasure and pain.

Atman manifests in 5 layers or sheaths, the total personality is called Jiva. These five sheaths are Annamaya (Physical), Pranamaya (Vital),

Manomaya (mental), Vijnanamaya (Intellectual) and Anandamaya (Spiritual or blissful self) (Sharma 1971).

In Vedic era they also explained stages of life as Brahmacharya (student hood) Gruhastha (household), Vanaprastha (retirement) and Sanyasa (Renunciation), which have an influence on prakriti of the persons. This is in contrast to the psychosexual personality classified by Freud as five stages of life (infancy, childhood, adolescence, adult and senile).

b. Sankya and Yoga

They have developed concept of prakriti or personality based on different function of the mind such as Manas (mind), Buddhi (intellect), chitta (memory) and Ahankara, (ego) (Yogendra 1950).

c. Nyaya Vaisesika

This Darsana simplified the understanding of personality by way of classifying the person under four different categories such as agnani (ignorant), sandigdha (doubtful), moodha (infatuated) and jnani (knowledgeable) – (Shripadmaprasad Shastry and Sri Hariram sukla 1942).

d. Bouddha Darsana

The study of personality in Buddhism has the entities as Five Skandas (Series of Events): Rupa (form), Vedana (feelings), Samjna (Conceptual knowledge), Samskara (coordination) and Vijnana (Knowledge). These five Skandas form the five temporary human identities or personality patterns.

e. Jainism

It speaks of personality in the form of lesya, they are of six types: black blue, dove gray, flaming red, pink, yellow and white (Krishnan 1968).

f. Personality in Sanskrit Sahitya

Sanskrit poets divided the people into four major traits

Dheerodatt (Person with Brave, noble, deep and firm mind)

Dheera (a person with brave nature)

Dheerarlalitha (a person with soft nature)

Dheera prasantha (a person with calm nature)

f. Personality in Bhagavadgita

In Bhagavadgita, personality is assessed as three types i.e., satvika, rajasika, tamasika based on three gunas.

g. Personality in Indian system of medicine

Ayurveda is the Science of life. It is medical science also. Ayurveda defines personality as prakrti. It defines personality in terms of bodily humours i.e., vata (wind), pitta (bile) and Kapha (Phlegm).

h. Personality in Siddha

Siddha system of medicine which has its texts in Tamil language also explains personality on the basis of prakrti similar to Ayurveda vata, (wind) azhal corresponding to pitta (bile) and iyan corresponding to kapha (phlegm) called Mukkutram.

2.4 Assessment of prakrti in Ayurveda

1. An attempt to study the correlation between the biochemical difference of the dominant hemispheres and prakrti has yielded to inconclusive results (Kurup 2003).
2. A study of systems analyses input output and storage using co enzyme as evolutionary marker of human cell has found recognizing correlation with vata pitta kapha (Hankey A 2005)
3. An attempt to (study) and genetic basis of prakrti with special reference to human HLA polymorphism.

Ayurvedic prakrti has been a topic of many correlative studies in the modern perspective, a few of them worth mentioning as follows,

- 3) Chopra's book on positive health provides a tool for self Ayurveda test of prakrti. This consists of 60 questions divided into three sections. 20 questions apply to vata dosa, 20 questions apply to pitta dosa and 20 to kapha dosa. Subjects are asked to read each statement carefully and mark, on a scale of score 0-6, where 0=doesn't apply, 3=applies somewhat and 6=applies mostly.

Kasture also framed a questionnaire for assessment of prakrti, which is based on practical aspects. This questionnaire is framed in two sections. Section one is an interrogatory method, in which few questions are asked, and choices of 3 answers are given in three columns for vata, pitta and kapha respectively. Subjects are said to mark to which group he feels he belongs to. Section two is a physical examination by the attending physician or the observer. In this also the same method is followed.

BASIC PRINCIPLES OF AYURVEDA BY V.B. ATHAVALE

In this he says that the three biological elements have certain principles and these constitute the entire body and mind, their qualities are reflected in the Physical and mental characteristics of an individual. He has, in his book given a table in which he gives in detail the characteristics of person with vata, pitta, kapha and sama prakṛti.

1. A biostatistical approach to compute quantitative estimates of tridosha (joshi RR) 2005

CHAPTER 3

AIMS AND SCOPE OF THE STUDY

AIMS

- 1) To develop Ayurvedic personality inventory.

SCOPE:

This questionnaire for assessment of the prakrti will be useful in advising an individual about the regimen of lifestyle modification to prevent diseases to which he is prone and in improving the quality of life. One can have an insight into the subject's physiological functioning. Based on prakrti one can assess a child's performance, can determine the load of work and also suggest the type of career suitable to the individual.

Objective:

- 1) To formulate a comprehensive battery of items selected from traditional texts of Ayurveda
- 2) To subject them to tests of validity and reliability
- 3) To finalize a sound inventory for clinical use and also as a research tool.

CHAPTER 4

METHODS

4.1 Subjects

350 subjects were studied

4.1.1 Selection of subjects

Students in age group from 10 to 17 years were selected for the study (See Appendix 7, Table 7.5)

4.1.2 Source of subjects

5 English Medium schools situated in South Bangalore (See Appendix 7, Table 7.4)

4.1.3 Inclusion and exclusion criteria

Inclusion criteria

1. Age between 10-17 years
2. English medium
3. Males and females
4. Healthy students

Exclusion criteria

1. Age above 17 years and below 10 years
2. Students with any systemic disease

4.2 Design of the study

DPI was developed following the standard procedure. It consisted of two parts. The first part was to prepare the questionnaire and check its content validity. The second part consisted of checking reliability by administering it to students and validity by cross checking with Ayurveda Physicians.

4.2.1 Preparation of DPI

The base material used for selecting the items included 4 available questionnaires in English language and traditional texts.

a) DPI was developed by selecting from the earlier questionnaires like

- I. Basic principles of Ayurveda by Dr Athvale
- II. Questionnaire by Dr Deepak Chopra's perfect health
- III. Dr Kasture's Prakrti
- IV. Amruth Monthly Magazine

b) Some Questions were framed from the classic texts of Ayurveda including Caraka samhita, Vagbhata samhita, and Sushrutha samhita (See Appendix 1).

150 questions (50 each for vata, pitta, kapha) were framed as per the information, which listed initially by selecting the question from these sources. These included questions with respect to physical features, psychological perceptions of the individual activities. A requisition letter with a copy of shlokas and previous questionnaires were sent to 10 Ayurveda physicians (See Appendix 2). Considering the suggestions of physicians the items were clarified under two sections,

dealing with the physical features will be assessed by the clinicians and section two consisting of self administered questionnaire depicting their preference of food(ahara), activities,(vihara) and cognitive(vichara). The numbers of items were reduced to 60 in each section (total120) with 20 questions each in vata, pitta and kapha categories. Checking the validity and reliability of section two of the DPI is detailed in this work, section one of DPI was developed validated simultaneously by my college and final version was compared. Content validity (which is a measure whether the item mean what they are expected to meant) was under taken after selecting 60 items for section 2 of DPI.

4. 2.2 Development

1. I sleep well.

This item has formulated from the reference of following sloka. This is kapha item vihāra category.

गम्भीरशब्दः श्रुतिशास्त्रनिद्रा तन्द्राप्रियस्तिक्त कटूष्ण भोजी ॥

ज्ञा संहित प्रथम स्थान ५ २१

2. Generally my bowels are irregular with hard stools.

This is vāta item vihāra category.

This item is selected from Kasture's questionnaire

3. Whenever I am sick, I also experience pain.

This is vāta item vicāra category.

Taken from Kasture's questionnaire

4. I have a steady temperament.

This item is formulated from the reference of following sloka. This is kapha item vicāra category.

5. I am irritable if I miss a meal.

This item is formulated from the reference of following sloka. This is pitta item vicāra category.

प्रभूतपिप्लुव्यङ्गतिलपिडकाःक्षुत्पिपासावन्तः च वि ८-१७

6. I avoid difficult situations.

This is kapha item vicāra category.

क्लेशक्षमो मानयिता गुरूणां ज्ञेयो बलासप्रकृतिर्मनुष्यः ॥ योग रत्नाकर कप्अ

7. I do not like humid weather.

This item is formulated from the reference of following sloka. This is kapha item vicāra category.

तस्यौष्ण्यात् पित्तला भवन्त्युष्णासहा

8. I take a lot of initiating in doing my activities.

This is vāta items vihāra category. Amruth Ayurveda

9. I like to eat snacks.

This item is formulated from the reference of following sloka. This is vāta item ahāra category.

लडुत्वाल्लडुचपलगतिचेष्टाहारव्याहाराः च वि ८-१८

10. If ill I am likely to get fever, rashes and inflammation.

Selected from the Deepak Chopra's questionnaire. This is pitta item vihāra category.

11. I enjoy planning my activities.

This item is formulated from the reference of following sloka. This is pitta

item vicāra category.

मेधावी निपुणमतिर्विगृह्य वक्ता तेजस्वी समितिषु दुर्निवारवीर्यः । सु शा ४- ६९

12.I remember my dreams easily.

This item has formulated from the reference of following sloka This is pitta item vicāra category.

मेधावी निपुणमतिर्विगृह्य वक्ता तेजस्वी समितिषु दुर्निवारवीर्यः । सु शा ४- ६९

13. I would like to share my ideas/ opinions with others.

Selected from Dipak chopra questionnaire This is pitta item vicāra category.

14.My skin is sensitive to outside temperature.

This item has formulated from the reference of following sloka This is pitta item vihāra category.

तस्यौष्ण्यात् पित्तला भवन्त्युष्णासहा उष्णमुखाःसुकुमारावदातगात्राः । च वि ८-१७

15.My moods and ideas change

This is vāta item ahāra vihāra vicāra category.

अवययस्थितमतिश्चलदृष्टिर्मन्दरत्नधनसञ्जयमित्रः । ॥सु शा ४-६६

16. Even after exercise I do not sweat much.

This item has formulated from the reference of following sloka .This is vāta item vihāra category.

शैत्यादल्पक्षुत्तृष्णासन्तापस्वेददोषाः च वि ८-१६

17. I am good at eating, large quantities of food.

This item has formulated from the reference of following sloka This is pitta item ahāra category.

तीक्ष्णाग्नयः प्रभूताशनपानाः च वि ८-१७

18. I gain weight easily.

Selected from the Amruth magazine. This is kapha item vihāra category.

19. In spite of eating well, I do not gain weight.

This item has formulated from the reference of following sloka This is vāta item vihāra category.

तस्य रौक्षाद्वातला रूक्षापचिताल्प शरीराः । c iv 8-98

20. I prefer warm climate and bright sunshine.

This item has formulated from the reference of following sloka .This is vāta item vihāra category.

शैत्या शीत असहिष्णवः प्रततशीतकोद्वेपक स्तम्भाः । च वि ८-९८

21. I dislike routine.

This item has formulated from the reference of following sloka .This is vāta item vicāra category.

लडुत्वाल्लडुचपलगतिचेष्टाहारव्याहाराः । च वि ८-९८

22. My digestion is fine.

This item has formulated from the reference of following sloka This is kapha item vicāra category.

तीक्ष्णाग्नयः प्रभूताशनपानाः च वि ८-१७

23. I am a creative thinker.

This item has formulated from the reference of following sloka.This is vāta item vicāra category.

मेधावी निपुणमतिर्विगृह्य वक्ता तेजस्वी समितिषु दुर्निवारवीर्यः । ॥सु शा ४- ६९

24. My bowel movements are regular, steady and voluminous.

Selected from kastures questionnaire This is kapha item vihāra category.

25. I remember dreams if they are intense or significant.

Selected from Dipak chopras questinnaie. This is kapha item vicāra category.

26. I am very fast in doing all my activities.

This item has formulated from the reference of following sloka .This is vāta item vihāra category.

शीघ्रत्वात् शीघ्रसमारम्भक्षोभविकारः शीघ्रत्रासरागविरागाः श्रुतग्राहिणोऽल्पस्मृतयश्च । च वि

८-९८

27. I like delicious food.

Selected from Amruth Mag This is pitta item ahāra category.

28. Exercise keeps my weight under control.

Selected from Kastures questionnaire This is kapha item vihāra category.

29. I am good leader and initiator.

This item has formulated from the reference of following sloka This is pitta item vicāra category.

भवति भी षु गतिर्द्वि षतामपि ॥ अ ह शा ३ ९१

30. My bowels are cleared daily twice.

Selected from Kastures questionnaire. This is pitta item vihāra category.

31. I walk slowly.

This item has formulated from the reference of following sloka This is kapha item ahāra category.

मन्दत्वान्मन्दचेष्टाहारव्याहराः च वि ८-१६

32. I walk moderately fast.

Selected from Kastures questionnaire. This is pitta item vihāra category.

33. I feel my stomach is full after eating less.

This item has formulated from the reference of following sloka. This

belongs to Vata type ahara category. .This is vāta item ahāra category.

शैत्यादल्पक्षुत्तृष्णासन्तापस्वेददोषाः च वि ८-१६

34. I would like to plan and follow a routine.

This item has formulated from the reference of following sloka This is pitta item vicāra category.

दृढशास्त्रमतिः स्थिरमित्रधनः परिगण्य चिरात् छद्ददाति बहु

35. I do exercise regularly to keep my emotions under control.

Selectrd from Deepak chopras This is pitta item vihāra category.

36. a) My appetite is irregular

This item has formulated from the reference of following sloka. This belongs to Vata type ahara category.

लृट्त्वाल्लड्चपलगतिचेष्टाहारव्याहाराः ।

37. I sweat even in cold season.

This item has formulated from the reference of following sloka This is pitta item vihāra category.

स्वेदनो दुर्गन्धः पीतशिथिलाङ्गस्ताम्रनखनयनतालुजिह्वौष्टपाणिपादतलो

38. I love leisurely activities.

Selected from Kastures questionnaire This is kapha item vihāra category.

39. I feel very thirsty.

This item has formulated from the reference of following sloka This is pitta item vihāra category.

तीक्ष्णान्नयः प्रभूताशनपानाः क्लेशासहि ष्णवा

40. I am fond of food.

This item has formulated from the reference of following sloka This is kapha item ahāra category.

पित्तं वह्निर्वन्हजं वा यदस्मात् पित्तोद्विक्तस्तीक्ष्णतृष्णाबुभुक्षः । अ ह शा ३ ९०

41. I skip meals without any difficulty.

This item has formulated from the reference of following sloka This is kapha item ahāra category.

शैत्यादल्पक्षुतृष्णासन्तापस्वेददोषाः च वि ८-१६

42. I do not normally change my opinions and ideas.

This item has formulated from the reference of following sloka This is kapha item vicāra category.

गम्भीरबुद्धिः स्थूलाङ्ग स्निग्धकेशो महाबलः । शा सं २२

43. I enjoy physical activities, especially competitive ones.

This item has formulated from the reference of following sloka This is pitta item vihāra category.

तैक्ष्ण्यात्तीपराक्रमाः तीक्ष्णाग्नयः च वि ८-१७

44. I like sweet food.

This item has formulated from the reference of following sloka .This is vāta item ahāra category.

भुङ्क्तेऽन्नं मधुरकषायतिक्तशीतम् । अ ह शा ३ ९२

45. Whenever I am ill I retain fluid or mucous.

Selected from Amruth □yurveda This is kapha item vihāra category.

46. My palm and soles are generally cold to touch.

This item has formulated from the reference of following sloka .This is vāta item vihāra category.

शैत्या शीत असहिष्णवः प्रततशीतकोद्वेपक स्तम्भाः । च वि ८-९८

47. I prefer cool and well ventilated places.

This item has formulated from the reference of following sloka This is pitta item vihāra category.

तस्यौष्ण्यात् पित्तला भवन्त्युष्णासहा उष्णमुखाः च वि ८-१७

48. I like bitter and astringent taste.

This item has formulated from the reference of following sloka This is kapha item ahāra

भुङ्क्तेऽन्नं मधुरकषायतिक्तशीतम् । अ ह शा ३ ९२

49. I enjoy getting exposed to sun.

This item has formulated from the reference of following sloka This is kapha item vihāra category.

शैत्या शीत असहिष्णवः च वि ८-९८

50. I change my mind easily.

This item has formulated from the reference of following sloka .This is vāta item vicāra category.

अवययस्थितमतिश्चलदृष्टिर्मन्दरत्नधनसञ्जयमित्रः । su śā 4/66

51. I work well with routine.

This item has formulated from the reference of following sloka This is kapha item vihāra category.

श्राद्धो गम्भीरः स्थूललक्षः क्षमावानार्यो अ ह शा ३ १०१

52. In my sleep I dream of wandering in sky on top of trees and mountains.

This item has formulated from the reference of following sloka .This is vāta item vicāra category.

आकाशचारी स्वप्नेषु वात प्रकृतिको नरः ॥ श सं २१

53. I am good organizer. Yes / No

Selected from kasture;'s questionnaire. This is kapha item vihāra category.

54. I would like to stay physically active.

This item has formulated from the reference of following sloka .This is vāta item vihāra category.

लढुतुवलुलुचपलगतिचेष्टाहारव्याहाराः च वि ॢ-१ॢ

55. I love fatty foods. Yes / No

Selected from the Amruth magazine. This is kapha item ahāra vihāra vicāra category.

56. If I make up my mind, I can gain or lose weight easily.

Selected from the Deepak chopra's questionnaire. This is pitta item ahāra vihāra vicāra category.

57. I like to eat sweets. This item has formulated from the reference of following sloka

डुङ्गेऽन्नं मधुरकषायतिक्तशीतम् । अ ह शा ३ १२

58. When I am under stress I feel afraid and anxious.

Selected from the questionnaire. Dipakchopra. This is vāta item ahāra vihāra vicāra category.

59. I feel more relaxed mentally, when exercising.

Selected from the questionnaire. Kasture. This is vāta item vihāra category.

60. I feel irritable under stress.

Selected from the questionnaire. Amruth magazine This is pitta item vihāra category.

4.2.3 Content validity

These questions framed along with the 4 reference questionnaires and the selected additional version from traditional texts sent to ten Ayurveda authenticity of the items.

- I. Comprehensiveness of the items in depicting the three doshas.
- II. Whether there were controversial statements if any.

Suggestions were taken and it is given in the table 7.2 (Appendix 7)

DPI was reformulated according to the suggestion of these experts. 60 items were reframed with 20 each in vata, pita and kapha (Appendix3)

This questionnaire was sent to two psychologists for Standardization and checking for language of presentation and advise on method n of scoring (Appendix 4, Table 7.3)

After the questionnaire was finalized according to there suggestions, all 60 questions are randomized using the research randomization scale (Appendix 4). A primary answer of yes or no was selected to ensure correctness of DPI through simple answers.

4.4 Assessment for reliability.

Assessment of prakrti was done by evaluating the characters of vata pitta kapha with respect of ahara, vihara and vichara in school students in age 10 to 17 years. These students were selected according to inclusion criteria from 5 different English medium schools in Bangalore south. Signed informed consent was obtained from the principal of the schools after explaining the purpose and design of the study.

The students were seated in a big hall with enough spacing in between to avoid interaction or copying. After clear instruction and explanation about the study they were shown an example about how to perform the test. They

were asked to use the pencil. Name, age, sex, and class were also recorded on the 1st page of the answer sheet to tick the selected answer yes or no. They were told not to discuss among themselves and clarify their doubts with the supervisors. Most of the students took 20 to 25 minutes to complete the test. Before collecting the answered sheets, the supervisors checked whether they had written their name and age and answered all 60 questions.

4.5 Test retest reliability

Reliability over time was checked by readministering the test to 100 students. 100 students who were selected randomly from these 350 students participated in retesting after the gap of ten days

The same questionnaire was administered after 10 days following the same procedure.

4.6 Cross validation with 3 Ayurvedic Experts (validity)

As there was no, any standardized questionnaire to validate this study, a group of 35 students were selected from the 350 students who were assessed with this questionnaire. They were taken to 2 ayurvedic experts from the physiology department and the prakriti was evaluated by them and noted down. This was done to cross validate the questionnaire.

4.7 Cross checking of inventory part1 with part2.

The questionnaire was crosschecked with the prakriti checklist. The same 350 students were assessed with the questionnaire and the checklist simultaneously and the prakriti was compared. This is the correlation between the questionnaire and checklist.

Chapter 5

Data collection and analysis

Subjects were assessed once with prakriti questionnaire prepared and simultaneously with checklist following all the precautions. The answer sheets obtained from the test administer on 1st day on 350 students and on the 10th day on 100 students were collected and scored by the help of a clinical psychologist .The answers yes and no were scored 1 or 0 respectively and scores for the individual dosha vata,pitta ,or kapha were added to get the score for each dosha..The Ayurveda prakriti was decided based on the highest score of the dosha. If there were two domains with equal scores then they were marked as vat pita, vatakapha, pittakapha, if the score was equal an all three domain they were marked as samaprakriti.

DATA ANALYSIS:

Data analysis was done using the SPSS Version 10.0 and the results were obtained. The reliability of the questionnaire was calculated by this data using split half method and Spearman brown test.

Chapter 6

RESULTS

The study sample of 350 students were selected from four different English medium schools with a mean age of 13.5 ± 2.4 . The name and address of the schools, number of students are shown in appendix 7.4 190(54.3%) of the subjects were female and 160 (45.7%) of them were male. The mean grade of education was 8.5 ± 2.4 .

Results of prakriti showed 38.28% of sample study to be predominantly pitta type followed by 30.28% of vata, 24% of kapha, 31.4% of pitta kapha, 1.71% of vatapitta and sama type and 0.8 % of vata kapha Dosha types. (See Appendix 6, Graph 6.1)

Secondary analysis consisted of comparing the prakriti questionnaire with prakriti checklist in the same study sample (n=350). There was found to be a significant correlation between these two forms for various prakriti types measured at $p < 0.01$ -level and spearman correlation coefficient r at 0.466 level. (See Appendix 6, Graph 6.3)

Correlation between questionnaire and section1

***** Method 1 (space saver) will be used for this analysis *****

RELIABILITY ANALYSIS - SCALE (ALPHA)

Reliability Coefficients

N of Cases = 350.0

N of Items = 2

Alpha = .6115

Since there is a lack of any standard instruments to measure tridosha types this questionnaire was validated by comparing the physician's diagnosis of prakriti type in the subject of study sample (n=35) which were randomly chosen. There was found to be a strong validity for the questionnaires $r=1.000$ (Pearson correlation) at 0.01 with respect to physician's diagnosis. (See Appendix 6, Graph 6.4)

Correlation between questionnaire, section1 and the physician's analysis

Correlations

		PRAKM	PRAKV	PRAKP
PRAKM	Pearson Correlation	1.000	.520**	.520**
	Sig. (2-tailed)	.	.001	.001
	N	35	35	35
PRAKV	Pearson Correlation	.520**	1.000	1.000**
	Sig. (2-tailed)	.001	.	.000
	N	35	35	35
PRAKP	Pearson Correlation	.520**	1.000**	1.000
	Sig. (2-tailed)	.001	.000	.
	N	35	35	35

** . Correlation is significant at the 0.01 level (2-tailed).

Reliability analysis was done by repeating the questionnaire in a subset of this population. The test-retests reliability between the two subsequent measurements in the same subjects showed a strong reliability correlation coefficient $r=0.91026$ using both Guttman and spearman correlation tests. (See Appendix 6, graph 6.2)

Reliability of the questionnaire

***** Method 1 (space saver) will be used for this analysis *****

RELIABILITY ANALYSIS - SCALE (ALPHA)

Reliability Coefficients

N of Cases = 100.0

N of Items = 2

Alpha = .9126

CHAPTER 7

DISCUSSION

With an increasing focus in the medical fraternity to understand the composition of a human being at psychic as well as physical levels, sanskritized descriptions of the concept of prakriti were analyzed and an anglicized version to suit the comprehension and lifestyle of present day man was aimed. Hence a tool which could measure the prakriti as belonging to respective doshic type was developed. This had 2 sections consisting of physical feature (objective) and psychological characteristics of Ahara, Vihara and Vichara (subjective). Part 2 of self explanatory questionnaire to be answered by the subject was the aim of this work. Individual questions were devised to elicit three aspects of human personality described in Ayurveda. These questions were designed to be simple and understandable. It was refined based on the opinions of 2 psychologists and 10 Ayurvedic experts. The reliability and validity were checked on students in age group 10 to 17 years.

350 normal healthy students both sexes were selected from 5 English medium schools in Bangalore. The subjects were then separately analyzed by Ayurvedic experts. The data so obtained correlated significantly with our findings. The results obtained was $r=1.000$ at .01 level.

The test retest reliability analysis was done with administration of questionnaire on the same subjects after 10 days duration. The reliability coefficient was found to be 0.9126 and is significant.

The results hence have shown that the questionnaire stands valid and reliable under the present boundaries of study. Though there have been many questionnaires like Deepak Chopra's, Kasture's and Amruth none of them has been standardized. A systematic study to validate these has not

been published. This present study appears to be a systematic scientific study of its kind in developing a standardized tool to elicit the prakriti.

The understanding of the prakriti of an individual helps to get the information on individual personality.

1. Mental characteristics including predominant mood and emotional vulnerability.
2. Physical characteristics with regards to his physical capabilities.
3. Psychological variability of different systems of the human body and their capacities.
4. Vulnerability of a person to different diseases across his life span.
5. An estimate of his life span.

CHAPTER 8

SUMMARY AND CONCLUSION

The present study is an attempt to develop a personality questionnaire called DPI based on Ayurveda concepts of health consisting of ahara, vihara, vichara of tridosas. The questionnaire was developed by pooling items from available questionnaires in English and Ayurvedic classics including caraka samhita, Sushruta samhita and Astangahrudaya. The questionnaire then subjected to test and retest reliability on 100 randomly selected students from the pool of 350. Further the validity of the questionnaire was checked by correlating the dosha type of the student obtained on DPI with the clinical evaluation by Ayurveda physician, on 35 students randomly selected out of 350. found by cross validation by physical check list developed by Dr.Mangala, student of Svyasa for 350 students and with the evaluation of prakrti by Ayurvedic experts for 35 students.

The questionnaire was administered to the school students in groups and the data was obtained analysis of result showed that.

1. Questionnaire is reliable since reliability is significant at .9126
2. Questionnaire is valid since correlation between questionnaire and physical checklist developed by Dr. Mangala, is significant at 0.6115 and with prakrti evaluated by doctors is significant at 1.000
3. Correlation between the items not significant which indicates that each items was assessing a specific aspect.

Hence this tool can be used as a basis for developing similar tools to suit people across different sections of the society at large. Such endeavors will go a long way in preventing most of the geriatric problems and counter the effects of the disease thus helping to create a disease free society

CHAPTER 9

LIMITATIONS AND SUGGESTION FOR FUTURE WORK

- The questionnaire can not be used for adult age above 17 years
- The questionnaire cannot be used for the people and children of physical and mental ailments
- The Questionnaire will be used for only English medium students
- A larger sample with broader age range and different socio cultural back ground should be assessed.
- The questionnaire can be applied to the Indian sample and non-Indian sample. This would tell us about whether the prakrti theory is universally applicable and whether socio cultural background influences the scores.
- Prakrti questionnaire can be administered to the clinical population to find out the tridosa pattern among different clinical group

REFERENCES

- 1) Athavale V. B. (2004). *Basic principles of Ayurveda*. Choukambha Sanskrit prathisthana, Delhi, India.;21-28
- 2) Anna M. (1993). *Astanga hrudaya*. Chowkambha publications I, Varanasi, India.
- 3) Bhushan P. Kalpana J. Aravind C. (2005). *Classification of human population based on HLA gene polymorphism and the concept of prakriti in Ayurveda*. J Altern complement med 11(2):349-53.
- 4) Chopra D. (1994). *Positive health*, Crown publishers, New York, America.
- 5) Dash B. and Sharma R. K (1995). *Caraka Samhita*. Chowkamba Sanskrit series office, Varanasi, India.;172
- 6) Dutta S (1992). *Harita samhita*. Krishanadas Academy, Varanasi, India.;65
- 7) Hankey A (2005). *A test of the systems analysis underlying the scientific theory of Ayurveda's Tridosha*. J Altern Complement Med 11(3):385-90
- 8) Joshi R .R (2004). *A biostatistical approach to Ayurveda: quantifying the tridosha*. J Altern Complement Med 10(5):879-89
- 9) Kasture H. (1997). *Practical aspect of prakriti*.choukambha Sanskrit series office, Gandhinagar,India.
- 10) Kurup R. K, Kurup. P.A. (2003). *Hypothalamic digoxin, hemispheric chemical dominance, and the tridosha theory*. Int J Neurosci 113(5):657-81.
- 11) Murthy S. (1992). *Sarangadharasamhita*. Choukambhapublications, Varanasi, India:61.

- 12) Shastry K.A. (1997). *Sushruta samhita*, Chowkambha sanskrit samsthana, Varanasi, India.;65-67
- 13) Tripathi I. & Tripathi D. (1998). *Yogaratnakara*. Krishnadas academy. Varanasi, India.;34-38

LIST OF ABBREVIATIONS

1. अह	ahṛ	-	अस्टान्गहृदय	astāngahr̥daya
2. च	ca	--	चरकसम्हित	carakasamhita
3. सु	su	-	सुश्रुत सम्हित	suśruta samhita
4. शा	śā	-	शारङ्गाधरसम्हित	śārangadharasamhita
5. यो र	yo ra	-	योगरत्नाकर	yogaratnākara
6. हा	hā	-	हारितसम्हित	hāritasamhita
7. सू	sū	-	sūtrasthāna	
8. शा	śā	-	śārirasthāna	
9. वि	vi	-	vimānasthāna	

