



A CRITICAL REVIEW OF BUDDHI, SMRITI, MEDHA, MANAS AND INTELLIGENCE QUOTIENT (IQ)

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ABSTRACT

Balyavastha (childhood) is a very valuable time in every individual's life. Today's children are tomorrow's citizens. Knowledge or skills learned and experienced in younger period of their life which is considered as a key period for their growth, development and intelligence definitely will have an impact as a deciding factor in determining the success in their future life. In this highly competitive world, people live a very fast life, and every second is important and those who have good skills, psyche, intelligence perform faster or better than others. Every parent wants their child to be the best. Many a times scores like IQ categorize the children and decide their future. Many succeed, at least few lags behind especially those affected with Poor scholastic performance, Low IQ. A better understanding of the key Ayurveda concepts like *Buddhi*, *Smriti*, *Medha*, *Manas* and even Intelligence in modern perspective is found to be very much vital for excelling in every manner with good quality life. *Medha* is an entity of *Buddhi* and *Buddhi* manifests with a combination of *Atma* (soul) and *Manas* (mind). *Buddhi* is a specific phenomenon that motivates an individual to perform or work in a specific manner and after proper analysing, they reach conclusive knowledge. *Smriti* is a specific ability to recollect past knowledge or experiences. *Medha* is a type of intellect which has the power of retention of knowledge. *Manas* has a very essential role in our daily life. Intelligence is the maturity of motor, language, personal, social, and adaptive behavior. This paper highlights these basic concepts and how each one of them is connected to one another.

Keywords: *Buddhi, Smriti, Medha, Manas, IQ*

INTRODUCTION

For the wellbeing of an individual, his or her psychological health plays a pivotal role.¹ *Balyavastha* (childhood) is a very particular stage of every individual's life cycle where they have certain peculiarities like *Aparipakva dhatu* (immature tissue elements), *Ajatavyanjana* (underdeveloped secondary sexual characters and immature reproductive ability), *Sukumaram* (delicate or tender), *Akleshasaha* (difficulty in tolerating hardships), *Asampoorna bala* (incomplete strength in terms of physical ability and also immunity), *Shleshma dhatu praya* (predominance of *Kapha dosha*).² Every child is physically, mentally, emotionally immature and in other words they are in a stage of progressive maturation, which is very well understood through the age classification of *Charaka*. *Balyavastha* is again subdivided into *Aparipakva dhatu avastha* (immature stage) and *Vivardhamana dhatu avastha* (stage of progressive maturation). As far as health is concerned, an ideal body and mind are everyone's basic needs. Proper knowledge about *Buddhi, Smriti, Medha* and *Manas* and their proper assessment are very important in our day-to-day life.

BUDDHI:

The word '*Buddhi*' is derived from '*Budh grahane*', meaning to grasp. *Buddhi* is the one which helps in obtaining knowledge. It helps in performing various activities. The development of *Buddhi* starts in the 6th month of *Garbhavastha*.³ *Buddhi* can be understood as knowledge obtained after perceiving objects through *Indriyas* and *Manas*.⁴ *Indriya* (senses) recognizes the objects and carries the information to *Manas* (mind). This information is further refined when it goes through *Chintana* (one requiring thought), *Vichara* (requiring consideration), and *Uha* (hypothesis) and is directed to *Atma* (soul).⁵ It is then transferred to *Buddhi*, which produces decisive knowledge resulting in final action. Therefore, *Buddhi* helps in Perception and Cognition.⁶ There are various opinions regarding the seat of *Buddhi* like *Hridaya* according to *Charaka Samhita* and *Ashtanga Hridya*,

while *Bhela Samhita* opines *Shiras* as the *sthaana*.⁷ Appropriate functioning of *Buddhi* (intelligence) and *Manas* (mind) is carried out by *Sadhaka pitta*, which has its abode in *Hridaya* (heart).⁸ *Tarpaka kapha*, situated in *Shiras*, protects and nourishes the sense organs in the brain. *Tarpaka Kapha* provides it.⁹ *Buddhi* has synonyms like *Dhee, Prajna, Mati, Chitta, Chetana* which have almost similar meanings. In order to initiate any particular work, proper execution and also concluding or finishing the work effectively is carried out by one's *Buddhi*. There are some *Buddhi Gunas* like *Ishtanishtavipathi* (a feeling of like and dislike), *Vyavasaya-Vyavasayotsaha* (an enthusiasm to perform various activities and the capacity to initiate anything), *Samadhita -Chittavritti-nirodhah* (not distractible), *Pratipatti* (to gain knowledge) by (a) *Pratyaksha* (sensual perception) (b) *Anumana* (inference) (c) *Sabda* (verbal testimony) (d) *Upamana* (analogy), *Grahana* (ability to grasp, a main feature of intelligence), *Dharana* (ability to retain learnt knowledge, a feature of intelligence), *Tatvajnana* (conceptual thinking), *Dhee* (ability to distinguish good from the bad, right from wrong), *Dhriti* (firmness or resolution), *Smriti* (a previous experience which is stored).¹⁰ *Prajna* is classified into *Dhee, Dhriti* and *Smriti*. *Dhee* is the one which is responsible for the real perception of knowledge. *Dhriti* is a governing feature that prevents the mind from indulging in unwanted or unnecessary things. *Smriti* is an insight derived from an individual's own imprints of previous experiences.¹¹ "*Buddhi*" functions after analysing the merits and demerits of an object.¹² *Buddhi* is the entity which analyses an object and makes a person speak, behave or react suitably.¹³ It is the initiating force behind action and resolution. The *Indriya Buddhi* helps *Indriya* in securing its related information. *Indriya Buddhis* can be understood as intelligence or knowledge related to the *Indriyas*, aiding the *Indriyas* to acquire the knowledge of their objects. *Pancha Indriya Buddhis* are *Chakshu Buddhi, Shrotra Buddhi, Ghraana Buddhi, Rasana Buddhi,*

and *Sparshana Buddhi* with their *Panchendriya arthas Roopa* (vision), *Shabda* (sound), *Gandha* (smell), *Rasa* (taste), *Sparsha* (touch) and *Panchendriya adhishtana* as eye, ear, nose, tongue and skin respectively.¹⁴

Jnana utpatti occurs when *Indriya* and *Artha* comes in contact with each other through mental presence. Involvement of *Indriya*, *Artha*, *Mana*, *Buddhi* and *Atma* are essential *Jnana utpatti* (attainment of knowledge).¹⁵ *Manobuddhi* can be understood as localization and interpretation of sensations in the cerebral cortex after completing a critical investigation of experiences and discrimination of distinct knowledge.¹⁶ *Dhee vibhrama (Buddhi vibhrama)* is a condition in which individual perceives the useful things as not useful or harmful and understands good thing as bad and vice versa.¹⁷

SMRITI:

The word *Smriti* is derived from the root *Smrti* and *Ktin* suffix. *Smriti* has a wide range of meaning or understanding which includes remembrance, thinking upon, reminiscence, thinking of, recalling to mind and memory.¹⁸ The knowledge of a previously experienced object is *Smriti*.¹⁹ In other words, the ability to recollect a past knowledge is *Smriti*.²⁰ *Smriti* (memory) comes from *Buddhi* (intelligence) which is processed with the support of *Mana* (mind), *Atma* (soul), *Indriya* (sense organ), and *Indriyarthas* (sense object).²¹ *Smriti* is the one that brings about attachment. Without *Smriti*, the functions of *Buddhi* are not possible. Without *Vichara* (thoughts), *Buddhi* cannot develop which occurs through *Smriti* or the past experiences.²² There are three ways, memory can be recollected. They are *Drishta* (visual), *Shruta* (auditory) and *Anubhuta* (memory of experiences already received).²³ In other words, *Drishta* is a knowledge obtained as a result of direct perception. *Shruta* is the one which is heard and *Anubhuta* is the knowledge gained through previous experiences.²⁴ Among the five types of *Vata*, *Udana Vayu* is the one which is mainly involved in the process of attaining *Smriti* (memory).²⁵ *Prana Vayu* also contributes in processing of memory and it helps in performing the proper activity of *Buddhi* (intelligence), *Mana* (mind)

and *Indriya* (sense organs).²⁶ *Vyana Vayu* provides stability and concentration of *Mana*.²⁷ The *Abhyantara karana* of *Smriti utpatti* are *Sannikarsha* of *Atma*, *Mana*, *Indriya* and *Indriyarthas*.²⁸ The sources for *Smriti* are *Nimitta* (perception to the cause or thinking back about events), *Roopagrahana* (perception of form or thinking back about it), *Sadrushya* (understanding through similarity or comparison), *Saviparyaya* (understanding through contrast), *Satvanubandha* (remembering through attention, concentration of mind or focusing well on that moment), *Abhyasa* (knowledge obtained by repeatedly practising), *Jnaanayoga* (remembering through knowledge acquisition or divine knowledge), and *Punah Shruta* (memorizes through hearing repeatedly).²⁹ These can be understood as the *Bahya karana* of *Smriti utpatti*. *Doshas*-both *Vata*, *Pitta*, *Kapha* combination pertaining to body and also *Rajas* and *Tamas* pertaining to mind, have three types of etiological factors-*Asatmyendriyarthas sannikarsha* (unwholesome contact with objects of senses), *Prajnaparadha* (intellectual blasphemy) and *Parinama* (Seasonal vagaries).³⁰ *Vata prakriti* persons are having peculiarities like; *Srutagrahi* (good grasping power), *Alpa smriti* (poor memory)³¹ and *Chala smriti* (unstable memory). *Pitta prakriti* individuals are *Medhavi* (intelligent).³² Those who belongs to *Kapha Prakriti* are *Chiragrahi* (low grasping power) and *Smritiman* (good memory).³³ Out of the eight *sara*, *Twak sara purusha* has a high level of intellect and *Sattva sara purusha* possess good memory.³⁴ When *manasa prakriti* is taken into consideration, it is believed that those possessing *satwika prakriti* is having good memory.³⁵ A study has found that recent memory is more observed in *Vata pradhana prakriti* individuals. *Chala guna* of *vata* results in *Alpa smriti* and *Sheegra grahana guna*. Remote memory and mental balance were found more in *Pitta pradhana prakriti* individuals. *Teekshna guna* of *pitta* might have resulted in *Nipunamathi* and *Medhavi guna* of *pitta*. Parameters like Immediate recall, Verbal similar, verbal dissimilar, delayed recall, attention, concentration, visual reproduction is observed more in *Kapha pradhana* individuals. *Sthira guna* of *Kapha* might have paved

the way for *Smritiman* and *Chiragrahi guna* of *Kapha*. When the status of *Drishta* and *Shruta smriti* were analysed, it was found to be the best in *Kapha*, better in *Vata* and good in *Pitta pradhana prakriti*.³⁶ *Smriti* is an understanding of one's previous experiences which helps in recollection and remembering those experienced facts or events. Various factors like *Sharirika*, *Manasa prakriti*, *Sara*, diet, lifestyle etc have a role in deciding the *Smriti*.

MEDHA:

Medha is derived from the root "medh sangame" which means to collect, meet, or come together.³⁷ *Ayurvedic* concept of *Medha* can possibly correlate to Intelligence, specifically a higher level of intellect in modern perspective. *Medha* is a faculty of *Buddhi* which retain the experiences and knowledge, can recollect the retained knowledge or information and thereby it prevents from indulging in *Prajnaparadha*.³⁸ *Medha* can also be understood as *Grahana shakti* (ability for grasping) and *Dharana shakti* (ability for retention).³⁹ *Medha* declines as age advances, and is mainly individualistic.⁴⁰ and it is dependent on various factors like environment, diet etc. One who has good *Medha* can acquire the required knowledge about many things and becomes learned. Such a form of knowledge gets retained in our body for a longer period of time and is not easily forgotten.⁴¹ *Shiras* or *Masthishka* can be understood as the seat of *Medha*.⁴² For the assessment of various factors three methods of examination are mentioned as Out of the three methods for examination- *Pratyaksha*, *Aptopadesha* and *Anumana*, *Medha* can be assessed using *Anumana pareeksha* (Inferential knowledge).⁴³ Good sleep helps in proper functioning of *Medha*. *Jnana* and *Ajnana* depend upon *Nidra* (sleep). While analyzing the definition of *Swastha*, importantly *Prasanna atma* and *Prasanna mana* and *Prasanna indriya* are very much essential. There is a necessity to enhance one's *Medha* for better thoughts, thinking and also for a better living. *Ayurveda* classical textbooks has detailly mentioned many a number of formulations which are having *Medhya* (nootropic) action and also the concepts like *Medhya Rasayana*.

MANAS:

Manas is derived from the dhatu 'man jnane/ manu avabhodane -the entity that makes a person knowledgeable or which provides knowledge.⁴⁴ *Manas* is the one through which knowledge is perceived. *Manas* has various synonyms like *Chetana*, *Mana*, *Hrudaya*, *Chitta*, *Chetasa*, *Satva*.⁴⁵ *Satwa*, *Raja* and *Tama* are the qualities of *Manas*. Mind helps the *indriyas* to attain knowledge of object. *Manas* is known as *Ubhayendriya* (both *Jnanendriya* and *Karmendriya*, as it supports the functioning of both sensory and motor areas of the nervous system.⁴⁶

Mano lakshanas are *Jnanasya Bhava* – For gaining the *Jnana*, *Sannikarsha* of *Atma*, *Manas*, *Indriya* and *Artha* is essential. *Jnanasya Abhava* – If *Manas* is not involved along with *Atma*, *Indriya*, *Mana* and *Artha*, then *Jnana* (knowledge) cannot be attained.⁴⁷ *Mano guna* are *Anutva* and *Ekatva*. *Anutva* is subtle or minute and *Ekatva* is single factor. *Manas* will not be able to perceive more *Vishayas* from various *Indriya* at a time, this is *Ekatva Guna*. When many *Vishayas* seems to be perceived at a time. This is because of *Anutva*.⁴⁸ We cannot perceive those sensations related to touch, colour, taste, smell and sound together at a time or simultaneously.⁴⁹ Regarding *sthaana* of *Manas*, there is difference of opinion like *Hridaya*⁵⁰, *Shira*⁵¹, *Shira*⁵² especially between *Shira* and *Thalu*, *Sarvasharira*.⁵³ *Mano vishayas* are: *Chintya* which is thinking or recollecting *Purva anubhava* or *Jnana* and making use of it in the further acts in future, whether to do it or not. Thinking of what to do and what not to do is *Chintya*. *Vicharya*, which is the *Guna Dosha Vicharana* (analyzing the subjects by understanding the merits and demerits) of *Jnana*, *Uuhya / Tarka* is to establish an appropriate explanation after the enquiry of *Guna* and *Dosha* (speculations and finding out possibilities). *Dhyeya* is to establish proper concentration, deep thinking and fixation of the mind which fluctuates, and thereby achieving *Yadartha Jnana*. *Sankalpa* is *Karthavya Akarthavya Nirnaya* (determination to do various actions to achieve a certain goal).⁵⁴

Visualizing or seeing an object is attained by *Manas* not by *Chakshu*. *Chakshu* acts as an observing media but real perception is achieved by *Manas*. *Indriyas* achieve appropriate perception of their objects by the involvement of *Manas*. If mind is not properly concentrating, and it is somewhere else rather than focusing in the required area, the *Artha* in front of eyes cannot be visualized and even the highest or maximum amount of sound also may not be heard. Similarly, if the mind is properly concentrating, even mi-

nute sounds also can be perceived effectively. *Manas* plays a significant role in the perception of *Jnana* (knowledge).⁵⁵

INTELLIGENCE QUOTIENT (IQ):

Intelligence can be defined as a composite maturity of motor, language, adaptive and personal-social behavior.⁵⁶ Intellect is the ability to reason, plan, think abstractly to solve problems and to learn. Intellectual functioning is measured by Intelligence Quotient (IQ).⁵⁷ Intelligence tests calculate IQ which can be understood as an index of the intellectual brightness of the child.⁵⁸

$$IQ = \left[\frac{\text{Mental Age (MA)}}{\text{Chronological age (CA)}} \right] \times 100.$$

There are many scales or tests to assess IQ like Stanford-Binet Intelligence scale which is a measure of verbal ability, short term memory, perceptual skills and hand-eye coordination. Around 45-60 minutes is required for evaluation. Indian adaptation of it, known as Binet-Kamat test of intelligence, was designed in 1967 by Kamat. Wechsler Intelligence scale for children (WISC-III) was designed by Wechsler in 1949. It has verbal and performance scale, which needs around 45-60 minutes for assessment. Malin's Intelligence scale for Indian children (MISIC) is an Indian adaptation of WISC designed by Malin in 1969. Many items are related to formal schooling. Good enough Draw-A-Man test is used in children between 3 and 13 years of age.⁵⁹

Scholastic backwardness, also known as Poor Scholastic performance in a child is achieving poor grades in school. This may happen as a result of poor intellectual ability, learning disabilities, poverty, health issues, unfavorable environment in home as well as in school which is not supportive for learning like excessively strict parents, stress, bullying by friends, quarrelling with peers. There are some early clues like regular skipping of classes, reduced interest in class, not completing assignments and homework within the stipulated time. Early identification, identifying the root causes and initiation of remedial measures and suitable supportive interventions is very useful.⁶⁰

DISCUSSION

Buddhi, *Smriti* and *Medha* are all part of the same process. All three of them need to be united in order to have a better recollection, retention and to perform various activities thereby for a better day-to-day living. Completeness cannot be attained in the absence of anyone of these.⁶¹ By involving in regular studying, discussions, referring other treatises and having devotion towards the expert scholars, *Buddhi* and *Medha* can be improved.⁶² *Dhee* is *Yatharthanubhava*, perceiving a matter as it is.⁶³ *Dhriti* can be understood as the governing factor⁶⁴. *Dhriti* is the one which prevents *Manas* from indulging in *Ahithartha*; it helps in attaining control over the decisions of mind.⁶⁵ *Smriti* is memorizing things which are directly heard, perceived or experienced.⁶⁶ *Udana Vayu*, *Prana Vayu*, *Sadhaka pitta* and *Tarpaka Kapha* function together and support each other in the processing of memory.⁶⁷ *Smriti* is remembering those events that are directly heard, perceived or experienced earlier.⁶⁸ *Medha* can be understood as an uninterrupted, unobstructed perception and retention of knowledge. It collects knowledge which is acquired in depth from various sources.⁶⁹ *Manas* is *Ateendriya*, *Ubhayendriya* and it is situated throughout the body. It is key element for *Jnana Sadhana* ie, perception of knowledge.⁷⁰ Mental health is equally essential like physical health for one's overall wellbeing. Many diseases can be easily managed or even prevented when one achieves a perfect balance of both body and mind. A balanced and positive *Manas* which offers a psychological balance is more powerful than a physically visible body.⁷¹ Intelligence is the cognitive ability to acquire, learn, store and selectively reproduce skills and knowledge. It is a global ability to apply knowledge to manipulate environment, think properly and deal in a better manner in a particular situation.⁷²

Adravyabhoota and *Dravyabhoota chikitsa* are said to help in achieving excellence of memory.⁷³ Diet plays a key role in attaining better intelligence. As a child, the first and foremost diet- breast milk itself has the ability to get better IQ. Breast fed babies have better IQ when compared to those who are not receiving

breast feeding. Similarly, properly taken food of required quality and quantity also contributes towards a better functioning of these entities. Ayurveda describes certain group of drugs called *Medhya dravya* (nootropic) and *Rasayana* (rejuvenator) which are also very much helpful. Drugs like *Brahmi* (*Bacopa monnieri* (Linn.)Pannel.), *Shankhapushpi* (*Convolvulus Puliricaulis* Choicy.), *Guduchi* (*Tinospora cordifolia*), *Aswagandha* (*Withania Somnifera* Dunal.), *Yashtimadhu* (*Glycyrrhiza glabra* Linn.), *Mandukaparni* (*Centalla asiatica* (L.) Urb), *Vacha* (*Acorus calamus* Linn.), *Jatamansi* (*Nardostchys jatamansi* D.C) are the well-known for possessing *Medhya* and *Rasayana* effects.⁷⁴

CONCLUSION

Buddhi is a specific phenomenon by which knowledge is accomplished or gained. *Smriti* can be understood as an ability or capacity to store knowledge and also to recollect experiences or information from the past. *Medha* is considered as a higher level of intellect, and it helps in recalling a previously retained knowledge and preventing us from making errors or mistakes. *Manas* affects the health and disease of each individual. The totality of excellence of *Buddhi*, *Smriti*, *Medha* and *Manas* is pivotal for maintaining the mental, physical health and thereby wellbeing of an individual. All efforts should aim at achieving the best possible potential with regards to intelligence, strength to live and perform for a meaningful life. Ayurveda has enormous options or possibilities to offer a better standard of *Buddhi*, *Smriti*, *Medha* by implementing various therapies as well as logical incorporation of nutritious food and some *Medhya dravyas*. Rational use of *Medhya Rasayana*- group of drugs is also very valuable in attaining this goal.

REFERENCES

1. Dr. Sujit Kumar, Dr. Deepika Mehra, Dr. Vaidehi V Raole, Dr. Sunil P Nikhate; A conceptual study on Medha, Buddhi, Dhee, Dhriti, Smriti, and Manas; The Pharma Innovation Journal 2019; 8(6): 567-572.
2. R. Vidyanath. Illustrated Caraka Samhita, English translation, and Chakrapani commentary. Chaukhamba Prakashak Varanasi. 1st Edition: 2022. Vimanasthana; Rogabhishagjitiye Vimana: Chapter 8, Verse 122.p.428

3. P.V. Sharma. Susruta Samhita with English translation of text and Dalhana's commentary along with critical notes. Chaukhamba Vishvabharati Varanasi. Volume II; Reprint edition 2010; Garbhavakranthi shareeram, Shaarira sthana. Chapter 3, verse 30. p.146
4. R K Sharma, Bhagwan Dash. Caraka Samhita. Varanasi, Chaukhamba Sanskrit series office. Volume II. Reprint edition;2009. Shareera sthana 1/22-23. p.316.
5. R K Sharma, Bhagwan Dash. Caraka Samhita. Vidyadhar Shukla, editor. 1st ed. Varanasi: Chaukhamba Sanskrit Sansthan; Vol. 1; 2002. p. 678.
6. Ashigha S, Prathviraj Puranik, Kavya. A Conceptual Study on Buddhi, Dhee, Dhriti, Smriti, Smritikaaranas and Medha in Comparison to Jean Piaget's Cognitive Development Factors. International Journal of Ayurveda and Pharma Research. 2023;11(Suppl 1):66-69. <https://doi.org/10.47070/ijapr.v11iSuppl1.2681>
7. Arya K. and Anjali Sivaram. Review article on the concept of Buddhi. Int. J. Res. Ayurveda Pharm. 2020;11(3):64-66. <http://dx.doi.org/10.7897/2277-4343.110362>
8. T.Sreekumar. Astanga Hridaya Vagbhata Sutrasthana-I. with English translation & commentary, Harisree hospital Publication department. IInd Edition: 2008. Sutrasthana. Chapter 12, Verse 13.p.312-313
9. T.Sreekumar. Astanga Hridaya Vagbhata Sutrasthana-I. with English translation & commentary, Harisree hospital Publication department, IInd Edition: 2008. Sutrasthana. Chapter 12, Verse 17.p.315-316
10. Ibamedabha Japang, Renu B Rathi, Jitesh Verma, Prakash Dwivedi. A Literary review on Buddhi (IQ) and Smriti (Memory)-An Ayurveda approach. International Journal of Ayurvedic Medicine, Vol 13 (3), 2022; 667-672
11. Shipra Girdhar, Rajesh Kumar Sharma, Dinesh Chandra Sharma. Significance of Buddhi in Ayurveda as well as Modern Aspects. J Ayurveda Integr Med Sci 2022; 11:165-168.
12. Dalhana commentary. Sushruta Samhita. Shareera sthana1/27: Chaukhamba Vishvabharati Oriental; 2013; vol 2.
13. R K Sharma, Bhagwan Dash. Caraka Samhita. Chaukhamba Sanskrit series office, Varanasi. Vol II. Reprint edition: 2009. Shareera sthana 1/32-33, p.319-320.

14. R K Sharma, Bhagwan Dash. Caraka Samhita. Chaukhamba Sanskrit series office, Varanasi. Vol I. Reprint edition: 2009. Sutra sthana 8/3,12; p.163, 167.
15. Shipra Girdhar, Rajesh Kumar Sharma, Dinesh Chandra Sharma. Significance of Buddhi in Ayurveda as well as Modern Aspects. J Ayurveda Integr Med Sci 2022; 11:165-168.
16. Shipra Girdhar, Rajesh Kumar Sharma, Dinesh Chandra Sharma. Significance of Buddhi in Ayurveda as well as Modern Aspects. J Ayurveda Integr Med Sci 2022; 11:165-168.
17. R K Sharma, Bhagwan Dash. Caraka Samhita. Chaukhamba Sanskrit series office, Varanasi. Vol II. Reprint edition: 2009. Shareera sthana 1/99p.336-337.
18. Mahajan Madhavi, Parauha Saurabh. The concept of Smriti (Memory)- A critical review study. JETIR December 2021, Volume 8, Issue 12; e206-217.
19. R K Sharma, Bhagwan Dash. Caraka Samhita. Varanasi, Chaukhamba Sanskrit series office, Volume III. Reprint edition: 2010. Unmada chikitsa; Chakrapani commentary Chikitsa sthana 9/3. p. 409
20. R K Sharma, Bhagwan Dash. Caraka Samhita. Varanasi, Chaukhamba Sanskrit series office, Volume III. Reprint edition: 2010. Unmada chikitsa; Chakrapani commentary Chikitsa sthana 9/3. p. 409
21. Ibamedabha Japang, Renu B Rathi, Jitesh Verma, Prakash Dwivedi. A Literary review on Buddhi (IQ) and Smriti (Memory)-An Ayurveda approach. International Journal of Ayurvedic Medicine, Vol 13 (3), 2022; 667-672
22. Ibamedabha Japang, Renu B Rathi, Jitesh Verma, Prakash Dwivedi. A Literary review on Buddhi (IQ) and Smriti (Memory)-An Ayurveda approach. International Journal of Ayurvedic Medicine, Vol 13 (3), 2022; 667-672
23. Nambiar Sruthi, Jadhav Lakshmi Prasad, Chiplunkar Shivprasad. Status of Smriti in different Prakruti: IJAAR Volume III, Issue II; May-June 2017. 306-313
24. Nambiar Sruthi, Jadhav Lakshmi Prasad, Chiplunkar Shivprasad. Status of Smriti in different Prakruti: IJAAR Volume III, Issue II; May-June 2017. 306-313
25. T.Sreekumar. Astanga Hridaya Vagbhata Sutrasthana-I with English translation & commentary, Harisree Hospital Publication department, IInd Edition: 2008. Sutrasthana. Chapter 12, Verse 5.p.307-308
26. T.Sreekumar. Astanga Hridaya Vagbhata Sutrasthana-I with English translation & commentary, Harisree Hospital Publication department, IInd Edition: 2008. Sutrasthana. Chapter 12, Verse 4.p.307
27. T.Sreekumar. Astanga Hridaya Vagbhata Sutrasthana-I with English translation & commentary, Harisree Hospital Publication department, IInd Edition: 2008. Sutrasthana. Chapter 12, Verse 6-7. p.308-309
28. Mahajan Madhavi, Parauha Saurabh. The concept of Smriti (Memory)- A critical review study. JETIR December 2021, Volume 8, Issue 12; e206-217.
29. R. Vidyanath. Illustrated Caraka Samhita. English translation and Chakrapani commentary: Chaukhamba Prakashak Varanasi; 1st Edition: 2022. Sharirasthana; Katidhapurushiyam shariram: Chapter 1, Verse 148-19. p.528
30. R K Sharma, Bhagwan Dash. Caraka Samhita. Varanasi, Chaukhamba Sanskrit series office, Volume II. Reprint edition:2009. Vimana sthana 6/5-6. p.186.
31. Prof.K.R. Srikantha Murthy. Vagbhata's Astanga Hridayam. Chowkhamba Krishnadas Academy Varanasi; Reprint edition: 2018, Volume 1, Sutrasthana. Chapter 11, Verse 1 1/2 - 2.p.154-155
32. Prof.K.R. Srikantha Murthy. Vagbhata's Astanga Hridayam. Chowkhamba Krishnadas Academy Varanasi; Reprint edition: 2018, Volume 1, Sutrasthana. Chapter 11, Verse 2.p.155
33. Prof.K.R. Srikantha Murthy. Vagbhata's Astanga Hridayam. Chowkhamba Krishnadas Academy Varanasi; Reprint edition: 2018, Volume 1, Sutrasthana. Chapter 11, Verse 2-3.p.155
34. Acharya YT. Caraka Samhita with Ayurveda Dipika commentary of Cakrapanidatta. Reprint edition. Varanasi: Chaukhamba Sanskrit Samsthan;2011. p.278
35. Paradakara HSB. Astanga Hrudaya with Sarvanga Sundaram commentary of Arunadatta and Ayurveda Rasayana of Hemadri. 9th edi. Varanasi: Chaukhamba Sanskrit Samsthan;2005. p.404
36. Sreekanth VM, Yaligar MG, Arun Raj GR, Gokul J, Tom Augustine. Status of Drishta smriti (visual memory) and Shruta smriti (auditory memory) in different Prakruti. A questionnaire-based survey study. Int J. Res. Ayurveda Pharm.2015; 6(6):667-671
37. Vishwanath Dwivedi Shastri, Bhavaprakasha Nighantu of Bhavaprakasha, Delhi, Motilal Banarsidas.1997, 775.
38. Acharya JT. Charaka Samhita with Ayurvedadipika Commentary by Chakrapanidatta, editor Acharya YT. Varanasi: Chowkhambha Orientalia; 2011.p54
39. Girija Devi, Kakuda Prashanth, Chiplunkar Shivprasad; Improvement of Medha-An imperative need of the era. IAMJ: Volume 1; Issue 4: July-August 2013. 1-6

40. Prof.K.R. Srikantha Murthy. Sarangadhara Samhita- a treatise on Ayurveda. Chaukambha Orientalia Varanasi, Reprint edition: 2009.Prathama Khanda, Chapter 6; Verse 20.p.30
41. Prof. (Dr.) Gyanendra Pandey. Acarya Harita Samhita: Sanskrit text with English commentary. Chowkhamba Sanskrit Series Office, Varanasi; Volume-II, First edition:2014.p.1439
42. Dr. Sujit Kumar, Dr. Deepika Mehra, Dr. Vaidehi V Raole, Dr. Sunil P Nikhate; A conceptual study on Medha, Buddhi, Dhee, Dhruti, Smruti and Manas; The Pharma Innovation Journal 2019; 8(6): 567-572
43. Dr. Sujit Kumar, Dr. Deepika Mehra, Dr. Vaidehi V Raole, Dr. Sunil P Nikhate; A conceptual study on Medha, Buddhi, Dhee, Dhruti, Smruti and Manas; The Pharma Innovation Journal 2019; 8(6): 567-572
44. Manjunatha B. Sunagar, Pratibha Kulkarni, Shantha Basavaraj Sunagar. The concept of manas in Ayurveda. wjpls, 2021, Vol. 7, Issue 12, 31 – 33. ISSN 2454-2229
45. Dr. Sujit Kumar, Dr. Deepika Mehra, Dr. Vaidehi V Raole, Dr. Sunil P Nikhate; A conceptual study on Medha, Buddhi, Dhee, Dhruti, Smruti and Manas; The Pharma Innovation Journal 2019; 8(6): 567-572
46. Dr Pritam Moharana, Dr Rakesh Roushan. A review on Smriti (Memory) and its affiliates in physiology. International Journal of Research; Volume VIII, Issue II, February 2019. 106-111. ISSN No:2236-6124
47. RK Sharma, Bhagwan Dash. Caraka Samhita. Chowkamba Sanskrit series office: Volume II. Reprint Edition: 2009, Sharirasthana: Chapter 1, Verse 18.p.315.
48. RK Sharma, Bhagwan Dash, Caraka Samhita. Chowkamba Sanskrit series office: Volume II. Reprint Edition:2009, Sharirasthana: Chapter 1, Verse 18.p.315.
49. Dr Nagaraj Kamath. Comprehensive textbook on Kriya Shareera. Chaukambha Sanskrit Sansthan, First edition: 2017, Volume-1; p.287
50. P.V. Sharma. Susruta Samhita with English translation of text and Dalhana's commentary along with critical notes. Chaukambha Visvabharati Varanasi; Volume II; Reprint edition: 2010; Garbhavyakarnasharir Sharira sthana. Chapter 4, verse 34. p.157
51. Prof.K.R. Srikantha Murthy. Vagbhata's Astanga Hridayam. Chowkhamba Krishnadas Academy Varanasi. Reprint edition: 2018; Volume 1, Sharirasthana: Chapter 4, Verse 13.p.424
52. Dr. P. Srinivasa Rao. Bhela Samhita, Text with English commentary. Chowkamba Krishnadas Academy, Varanasi, First edition: 2010, Chikitsa sthana, Chapter 8, Verse 10.p.223
53. Charaka, Vaidya Bhagwan Dash, Charaka Samhita, Vimanasthana: Chapter 5, Verse 16, Chowkamba Sanskrit series office: Reprint Edition, 2013; 2: 172.
54. Charaka. Vaidya Bhagwan Dash. Charaka Samhita, Sharirasthana: Chapter 1, Verse 315, Chowkamba Sanskrit series office: Reprint Edition, 2013; 2: 315.
55. Manjunatha B. Sunagar, Pratibha Kulkarni, Shantha Basavaraj Sunagar. The concept of manas in Ayurveda. wjpls, 2021, Vol. 7, Issue 12, 31 – 33. ISSN 2454-2229
56. Aruchamy Lakshmanaswamy. Textbook of Pediatrics. Elsevier; 1st Edition, 2022.p.95-96
57. Chapay Soren. Textbook of Pediatrics. Paras Medical Publisher; 1st Edition, 2016.p.293
58. Aruchamy Lakshmanaswamy. Textbook of Pediatrics. Elsevier; 1st Edition, 2022.p.95-96
59. Indumathy Santhanam. Illustrated Textbook of Pediatrics. Jaypee Publication, 1st Edition, 2018.p.11
60. Swarna Rekha Bhat. Achar's Textbook of Pediatrics. Universities Press (India) Private Ltd, 5th Edition, 2022.p.104
61. Girija Devi, Kekuda Prashanth, Chiplunkar Shivprasad; Improvement of Medha-An imperative need of the era. IAMJ: Volume 1;Issue 4:July-August 2013.1-6
62. P.V. Sharma. Susruta Samhita with English text translation, Dalhana's commentary, and critical notes. Chaukambha Visvabharati Varanasi; Volume II; Reprint edition :2010, Medhaayushkamiya rasayanam, Chikitsa sthana. Chapter 28, verses 27-28. p.537
63. R. Vidyanath. Illustrated Caraka Samhita, English translation along with Chakrapani commentary. Chaukambha Prakashak Varanasi; 1st Edition: 2022. Sharirasthana; Katidhapurushiyam shariram: Chapter 1, Verse 98.p.509-510
64. Trikamji Jadavaji T. Susruta Samhita of Susruta with Nibandhasangraha commentary by Dalhana. Reprint ed. Varanasi, Chaukamba Orientalia; 2013. Shareerasthana; Sarvabhoothachintha Shareeram: Chapter 1, Verse 18. p.343.
65. R. Vidyanath. Illustrated Caraka Samhita, English translation along with Chakrapani commentary. Chaukambha Prakashak Varanasi, 1st Edition :2022. Sharirasthana; Katidhapurushiyam shariram: Chapter 1, Verse 100.p.510
66. R. Vidyanath. Illustrated Caraka Samhita, English translation along with Chakrapani commentary.

- Chaukamabha Prakashak Varanasi; 1st Edition: 2022. Sharirasthana; Katidhapurushiyam shariram: Chapter 1, Verse 149.p.528
67. Ibamedabha Japang, Renu B Rathi, Jitesh Verma, Prakash Dwivedi. A Literary review on Buddhi (IQ) and Smriti (Memory)—An Ayurveda approach. International Journal of Ayurvedic Medicine, Vol 13 (3), 2022; 667—672
68. Nambiar Sruthi Surendran, Jadhav Lakshmi Prasad, Chiplunkar Shivprasad. The psychological and physical dimensions to Smriti. International Ayurvedic Medical Journal, Issue 3, May June-2013; ISSN:2320 5091
69. Sanskrit text with Sarvangasundhara commentary of Arunadutta and Ayurvedarasayana commentary of Hemadri on Ashtanga Hridaya of Vagbhata; Varanasi: Chaukamba Subharati Prakashan, 2018; Sutrasthana; Drava vigyaniya Adhyaya: Chapter 5, Verse 37. p.125.
70. Manjunatha B. Sunagar, Pratibha Kulkarni, Shantha Basavaraj Sunagar. The concept of manas in Ayurveda. wjpls, 2021, Vol. 7, Issue 12, 31 – 33. ISSN 2454-2229
71. Dr Rashi Sharma, Prof. Kavita Amrapurkar. Concept of Manas in Ayurveda. Chaukamba publications New Delhi; Reprint edition 2019; p.23
72. Suraj Gupte. The Short Textbook of Pediatrics. Jaypee Publishers; 12th Edition: 2016. p.92.
73. Mahajan Madhavi, Parauha Saurabh. The concept of Smriti (Memory)- A critical review study. JETIR December 2021, Volume 8, Issue 12; e206-217.
74. Kannan Sagar, Shailaja U, Vijayalaxmi Mallannavar, Nayan Kumar S, Manasa GH. Swarnaprashana and Swarnamritaprashana - for health and wellbeing of children: a review. J of Ayurveda and Hol Med (JAHM). 2023;11(5): 9-25

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