

The Mapping of the concepts and its Application of Ashtanga yoga with Blooms taxonomy

Dr Anagha Mathad^{1*}, Dr Amit Upasani², Dr Prasanna Mathad³

¹PhD Scholar, Assistant Professor, Department of Ayurveda Samhita and Siddhant, Parul Institute of Ayurveda and Research, Faculty of Ayurveda, Parul University, Limda, Waghodia, Vadodara, India

²Professor and HOD, Department of Ayurveda Samhita and Siddhant, Parul Institute of Ayurveda and Research, Parul University, Limda, Waghodia, Vadodara, India.

³Professor and HOD, Department of Rasashatra and Bhaishajya Kalpana, Parul Institute of Ayurveda and Research, Parul University, Limda, Waghodia, Vadodara, India

Corresponding author: Dr Anagha Mathad, Email: anu.as.anagha@gmail.com

DOI: 10.63001/tbs.2025.v20.i04.pp2094-2102

Keywords

Bloom's Taxonomy, Ashtanga Yoga, Cognitive, Higher order of learning

Received on:

19-10-2025

Accepted on:

23-11-2025

Published on:

31-12-2025

ABSTRACT

The classification of different levels of understanding, remembering, thought process, applications of learned concepts are measured with the scale called as Blooms Taxonomy. It was developed by Benjamin Bloom and group in the year 1950, hence named on the inventor as Bloom's Taxonomy. Every student's academic performance measured with the irrespective of the discipline under the NEP 2020, it helps to educate the students about curriculum and higher order of thinking with different assessments, in 2001 it is revised again with cognitive domain. hence it is important to know about the mechanism of bloom's taxonomy. In Yoga Darshan by Acharya Patanjali explained about the Ashtanga Yoga, which explains different levels of knowing oneself – self-realization. In this article the concept of Ashantga Yoga is known through the levels of Bloom's Taxonomy through the mapping process. It helps to know about the importance and application of practicing the Ashtanga Yoga, through the levels of cognitive process which helps for self-realization.

Introduction

The Bloom's Taxonomy includes the main domain of learning as follows Cognitive (Knowledge) which Focuses on the mental skills like critical thinking and problem-solving methods This is the most widely known domain. Affective (Emotions) which Relates to attitudes, feelings, and values. Psychomotor (Actions) which Concerns about physical and manual skills.

The Revised Cognitive Domain in the 2001, The cognitive domain is the most and widely used part of the taxonomy. A 2001 revision updated with the categories from nouns to action verbs and slightly changed the order of the top levels to emphasize a more dynamic process.

The six levels of the revised cognitive domain, from basic to complex thinking skills, are^{10,11,12}:

Table-1

Level	Description	Example Verbs for Objectives
Remember	Recalling the information	Define, list, name, recall the things
Understand	Explaining about ideas and concepts	Classify, describe, explain, summarize about concepts
Apply	Using knowledge in new situations/ circumstances	Calculate, demonstrate, implement, solve the problems
Analyze	Breaking down the information and seeing how parts relate to	Compare in between , contrast, differentiate and examine.
Evaluate	Making judgments based on the criteria.	Appraise, argue, assess, critique.
Create	Producing something a new or original	Assemble, design, develop about the formulate.

In the ancient time vedas- Adigranth of Bharat in which the transfer of knowledge from one generation to another was through the oral -recitation of hymns called as shruti, later the smriti as written formats of documentation started and continued with Darshana as Indian Philosophy. Among the Astika Darshana- Yoga Darshan is one among them, The word Yoga has first mentioned in Rigveda, which is the oldest of the sacred texts. Sir John Marshal was view the statues of Yoga purusha found in the excavation of Harappa and Mohanjo-Daro which clearly explains the popularity of Yoga is very ancient in India. Kala of Yoga Darshana is divided into two phases as Sutrakala and Vrittikala. During the Sutrakala, the Sutras were written. (342B.C.) to (142B.C.) During Vrittikala, the Vartikas, Bhashyas were written. (242 A.D.) to (1442 A.D.)It could be said, later Maharshi Patanjali systematically codified the concepts of Yoga philosophy. Yoga Darshana has explained about Ashtanga Yoga as Yama, Niyama, Aasana, Pranayama, Pratyahara, Dharana, Dhyana, Samadhi. Out of which first four are called as Bahiranga Yoga, next 3 are called as Antaranga Yoga, last one related to Aatama^{1,2}.

Table-2 - Types of yama

<i>Ahimsa</i>	<i>Himsa</i> is one of the <i>Dashavidha Papakarma</i> . <i>Himsa</i> should not be done with Prani. Differentation in between people by there <i>Varna, Jati</i> is not allowed. So <i>Ahimsa</i> should be followed.
<i>Satya</i> <i>Asteya</i>	<i>Satya</i> means truth speaking. Persons <i>Kruti</i> & his <i>Vani</i> should be matched then only it is considered as <i>Satya</i> .
<i>Brahmacharya</i>	<i>Steya</i> means <i>Chorya Karma</i> due to interest in others money or valuable things. So not keeping interest in money or valuable things is <i>Asteya</i>

<i>Aparigraha</i>	Detachment from all worldly things
-------------------	------------------------------------

Table-3 Types of Niyama

<i>Shoucha</i>	Internal as well as external cleanliness means <i>Shoucha</i>
<i>Santosha</i>	Feeling of satisfaction in whatever we have & not having any wish to gain more than need is <i>Santosha</i>
<i>Tapa</i>	Toleration of feelings like <i>Sukha-Dukha</i> , <i>Kshudha-Trishna</i> without any complaint if they are not getting satisfied now only.
<i>Swadhyaya</i>	<i>Swadhyaya</i> means <i>Yoga Shastra</i> refers learning of <i>Moksha Shastra</i> , chanting of Mantras as taught by teachers is at the initiation of teaching is <i>Swadhyaya</i> .
<i>Ishwara Pranidhana</i>	Complete devotion towards the GOD is <i>Ishwara Pranidhana</i>

Pranayama includes steps as follows-

- 1-Bahya Vritti - *Prashwasa* process is prolonged and fine. *Shwasa* process remains same
- 2-Aabhyantara Vritti- *Shwasa* process is prolonged and fine. *Prashwasa* process remains same
- 3-Stambhavritti- Suspension of *Shwasa-Prashwas Gati*
- 4- Chaturth Pranayama- *Baahya Abhyantara Vishayakshepi Chaturthah*” i.e. Absence of *Shwasa Prashwas Gati*.

Pratyahara is divided into 4 stages.

- 1-Indriya Pratyahara - Due to control over *Indriyas*, *Manas* gets indulgence easily in *Dharana*.
- 2-Prana Pratyahara - *Prana* a vital entity of body. To avoid it from getting scattered one should attain control over it.
- 3-Karma Pratyahara- If person achieve control over *Indriyas* and *Prana* then the *Karma* done by that person is always in controlled manner.
- 4- Mano Pratyahara- It is last stage. When a person attains above 3 *Pratyaharas* then his mind is detached from all external objects and only focuses on its aim.

Dharana- includes Focusing the mind particularly on *Desha*, (*Nasika Agra Bhag*, *Hridaya Kamala*), *Bahya Padartha* (*Ishta Devata Murti*) etc. is *Dharana*. Due to control over *Pavan* and *Indriyas* by the *Pranayama* and *Pratyahara* respectively, it becomes easy to fix the mind on one point.

Dhyana- The unbroken flow of knowledge to that object is *Dhyana*.

The mind tries to think of one object to hold itself to one particular spot, as the top of the head, the heart etc. and if the mind succeeds in receiving sensations only through those parts of body, and through no other part, that would be *Dharana*. and when the mind succeeds in keeping itself in that state for some time it is called as *Dhyana*. Hence it is said that *Dhyana* is integrally related to *Dharana*.

Samadhi- The *Samadhi* is divided into 2 varieties one is *Sampradnyata Samadhi* and other is *Asampradnyata Samadhi*. *Sampradnyata Samadhi* :- It is also called as *Sabija Samadhi*. Because it does not destroy Beeja of past actions, thus it can't give liberation. It is having four varieties

1-*Savitarka Samadhi* - When the mind meditates upon an object again and again, by isolating it from other objects.

2-*Savichara Samadhi* - When the meditation goes a step higher, and it takes *Tanmatras* as its object, and thinks of them as in time and space is called *Savichara*.

3-*Sanandam samadhi*- The next step is when the elements are given up, either as a gross or as fine, and the object of meditation is the interior organ, and when the thinking of organ is thought of the qualities of activity, and of dullness, is called as *Sanandam*

4-*Asmita Samadhi*- When all the ideas have given up and only the object is the mind as it is & only the *Satwika Ahamkar* remains, it is called as *Asmita*.

Asampradnyata Samadhi -The state which gives us freedom is *Asampradnyata Samadhi*. The *Sampradnyata Samadhi* does not give us freedom, does not liberate the soul. Method of *Asampradnyata Samadhi* is to hold the mind as the object, and whenever through comes strike it down, allowing no thought to come into the mind, making it an entire vacuum, it is the moment when we shall attain liberation of soul. To be able to really do that is the manifestation of greatest strength, of the highest control. When one reached in this *Asampradnyata Samadhi* stage this *Samadhi* is called as *Nirbija Samadhi*^{6, 7&8}

Aim-

The Mapping of the concepts and its Application of Ashtanga yoga with Blooms taxonomy

Objective-1 To know the steps involved in Ashtanga Yoga

2- To study the levels of Blooms Taxonomy

3- Mapping of the concepts of Ashtanga Yoga and Blooms Taxonomy

Methodology – Mapping the concepts/steps involved in the cognitive process till the create level with 8 steps of Ashtanga Yoga.

Observation-

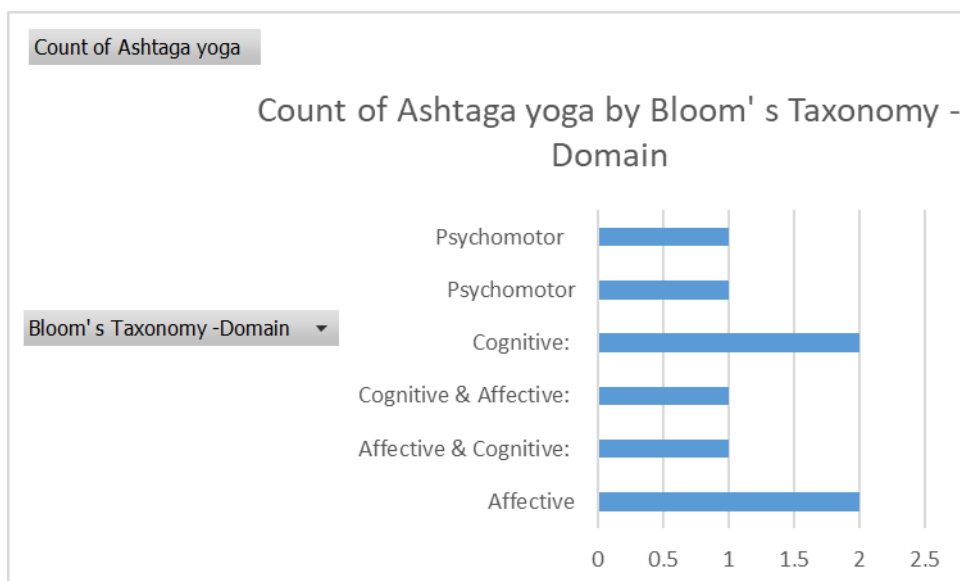
Comparison and Mapping

While the frameworks of Ashtanga Yoga and Bloom's Taxonomy have different origins and primary purposes, the practice of Ashtanga yoga involves outcomes that can be mapped to all three of Bloom's domains^{3,4,5}:

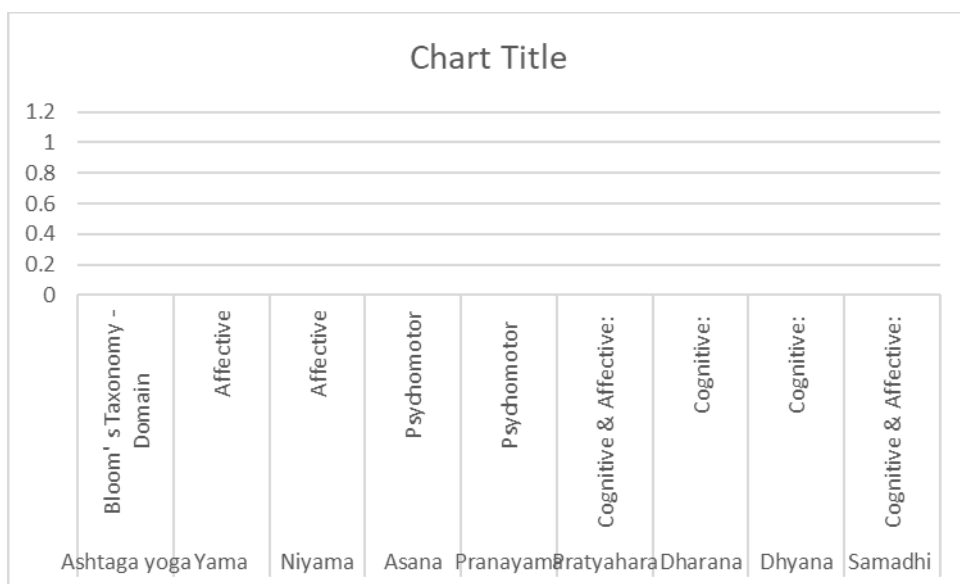
Table-4

Ashtanga Limb	Description	Corresponding Bloom's Domain(s)
Yama & Niyama	Ethical and personal conduct and values	Affective: Involves internalizing values and developing character (highest levels of the affective domain).
Asana	Physical postures to develop a steady, comfortable body	Psychomotor: Involves basic and skilled movements and developing physical abilities (middle to high levels of the psychomotor domain).
Pranayama	Conscious control of the breath.	Relates to control over physiological processes (a form of skilled physical control). Psychomotor domain
Pratyahara	Withdrawal of senses from external stimuli.	Cognitive & Affective: Requires mental discipline to focus attention inward (a cognitive skill) and manage one's response to the external world (affective).
Dharana & Dhyana	Concentration and meditation	Cognitive: These are advanced mental skills involving focus, analysis, and eventually a deep understanding and altered state of consciousness (higher cognitive levels).
Samadhi	State of super bliss/union	Affective & Cognitive: Represents the ultimate state of spiritual experience, a profound internal change (affective), and the realization of pure consciousness (cognitive).

Graph-1



Graph-2



Discussion

Bloom's taxonomy serves as a useful modern educational tool to categorize the outcomes of various yogic practices, while the eight limbs of yoga offer a holistic, integrated path for personal and spiritual development that naturally cultivates outcomes across all learning domains. Ashtanga yoga is being stages of attaining control over the mind, body and sensory objects by practicing the proper behavioral approach in Yama, Niyama stages, which develops the character with values involving the affective domain. Asana -practicing the different postures of body by balancing for certain duration in coordination of sensory organs, which involves psychomotor domain with middle to high level. Pranayama involves the control over breathing mechanism and conscious of mind, involves psychomotor level. Prathyahara involves the control over sense organs and external stimuli, involving cognitive and affective

domain, it helps to maintain the mental discipline. Dharana and Dhyana involves concentration and meditation, with cognitive domain with mental skills and understanding. Samadhi includes state of supreme union with affective and cognitive domain along with realization of pure conscious. Hence the levels of bloom's Taxonomy mapped here with Ashtanga yoga, it helps to explain the impotence of Practicing Ashtanga yoga to common People.

Core Aspect	Aṣṭāṅga Yoga	Bloom's Taxonomy
Nature	Spiritual-experiential	Educational-pedagogical
Structure	Hierarchical progression	Hierarchical learning levels
Goal	Self-realization (Kaivalya)	Mastery & higher-order thinking
Emphasis	Integration of body-mind-ethics	Knowledge, skills, values

Both systems:

Follow a stepwise developmental process, Emphasize internalization before mastery and Culminate in creative or transformative outcomes

1-Yama & Niyama → *Affective Domain*

Development of values, attitudes, discipline

Corresponds to: Receiving, Responding, Valuing, Organization of values

Examples: Ahimsā → ethical sensitivity, Śauca, Tapas → self-regulation and motivation

2-Āsana & Prāṇāyāma → *Psychomotor Domain*

Physical skill acquisition and refinement

Breath control and neuromuscular coordination

Bloom (Psychomotor): Imitation, Manipulation, Precision, Articulation, Naturalization

3-Pratyāhāra → *Transition Phase*

Withdrawal of senses, Shift from external learning to internal cognition

Acts as a bridge between: Psychomotor → Cognitive domains, Sensory input → Mental processing.

4-Dhāraṇā → *Cognitive: Attention & Application*

Sustained focus on a single object,

Comparable to: Apply, Analyze

Learning becomes intentional and disciplined.

5-Dhyāna → *Cognitive & Metacognitive*- Continuous, effortless awareness

Corresponds to: Analyze, Evaluate

Observes thought patterns, Develops insight and discernment (*Viveka*)

6-Samādhi → *Create / Transform*

Highest cognitive level, Beyond information → direct knowledge (*Prajñā*)

Comparable to Bloom's: Create (synthesis, originality), Transcends conventional cognition

Aṣṭāṅga Yoga can be seen as an ancient competency-based education model

Bloom's taxonomy provides a modern academic articulation of the same progression Useful for : Yoga curriculum design, Outcome-based education, Ayurveda pedagogy, Holistic assessment frameworks

Bloom's Taxonomy structures learning of the intellect; Aṣṭāṅga Yoga structures evolution of consciousness., Together, they demonstrate that true education integrates ethics, skills, cognition, and realization—a concept deeply aligned with Indian knowledge system

Conclusion

The Ashtanga yoga with 8 steps helps maintain the health of healthy person, prevent the diseases, helps to cure the diseases by regular practice of each 8 step involving the body, mind, sensory organs, conscious -mapped with bloom's Taxonomy which involves different levels of understanding and application. this mapping helps to understand the students and common people why and how to understand the Ashtanga Yoga, in which domain we are belonging, how it involves with cognitive, psychomotor and Affective domains can be achieved by practicing the Ashtanga Yoga.

References

- 1- Freeman D. *The Mirror of Yoga: Awakening the Intelligence of Body and Mind*. Boston: Shambhala Publications; 2012.
- 2- Smith G, editor. *Ashtanga Yoga: Practice and Philosophy*. New York: North Point Press; 2015.

- 3- Bloom BS, Engelhart MD, Furst EJ, Hill WH, Krathwohl DR. *Taxonomy of Educational Objectives: The Classification of Educational Goals. Handbook I: Cognitive Domain*. New York: Longmans, Green and Co.; 1956.
- 4- Krathwohl DR. A revision of Bloom's Taxonomy: An overview. *Theory Into Practice*. 2002;41(4):212-218.
- 5- Anderson LW, Krathwohl DR, editors. *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. New York: Longman; 2001.
- 6- Padmbhushana Acharya Baldev Upadhyaya, Bhartiya Darshana, Varanasi, Sharada Mandir Reprint, Tiritiya Khanda, Dashama Pariccheda, 2016;301.
- 7- Sushruta Samhita, Shri Dalhana and Gayadas hindi Commentry, Dr. K.K.Thakaral, Su.Su.15/41 Chaukhamba Sanskrit Sansthan Varanasi, 2016; 179.
- 8- Padmbhushana Acharya Baldev Upadhyaya, Bhartiya Darshana, Varanasi, Sharada Mandir Reprint, Tiritiya Khanda, Dashama Pariccheda, 2016;301.
- 9- Bloom BS. *Taxonomy of educational objectives: the classification of educational goals*. New York NY: Longmans, Green; 1956.
- 10- Anderson LW, Krathwohl DR. *A taxonomy for learning, teaching, and assessing: a revision of Bloom's taxonomy of educational objectives*. New York NY: Longmans; 2001.
- 11- Blanco MA, Capello CF, Dorsch JL, Perry GJ, Zanetti ML. A survey study of evidence-based medicine training in US and Canadian medical schools. *J Med Lib Assoc*. 2014 Jul;102(3):160–8. doi: 10.3163/1536-5050.102.3.005. DOI: <http://dx.doi.org/10.3163/1536-5050.102.3.005>.
- 12- Office for Institutional Assessment, Clemson University. The University Clemson, SC: Bloom's taxonomy action verbs <http://www.clemson.edu/assessment/assessmentpractices/referencematerials/>