

Research Article

Open Access

Higher Avadhans May Imply New Concept of Memory and Better Understanding of Evolution of Human Systems Using General Systems Theory and Quantum Phenomenon

Surendra Singh Pokharna

Former Scientist, Indian Space Research Organization, Dr. Daulat Singh Kothari Institute for research and Education, Udaipur (Rajasthan). India

ABSTRACT

In a previous paper published on Shatavdhan (Surendra Singh Pokharna (2023)), it was postulated that Shatavdhan could be a new state of consciousness. Actually, Shatavdhan is a Sanskrit word which consists of two parts. Shat means one hundred and Avadhan means sharp attention deep concentration and extra ordinary memory of the brain. In this phenomenon, the practitioner observes or is a part of one hundred activities and/or is asked many general questions, totaling one hundred, including poems, photo frame containing many pictures of leaders, scientists or famous personalities or, famous buildings, and simple mathematical computations and solving a puzzle in parts at different times and simultaneously listening to sound made at random intervals by a participant [1]. This is an example of extra ordinary multi-tasking power of brain. He or She remembers all of the hundred activities and events with highest precision at the end of the session which can last for few hours and can recall them in the same sequence, reverse sequence or random sequence with the same original precision, which could be almost 100 percent [1-6]. A world renowned shatavdhani of the present era was Shri Raj Chandji, teacher (Guru) of Mahatma Gandhi, who is known for nonviolent agitation for getting freedom of India from Britain [7-9]. Gandhi tested his teacher (Shrimad Rajchand) for this capability of Shatavdhan and also learned principle of non-violence from him. In a previous, general aspects of Shatavdhan were described along with briefs of procedure and activities. Spiritual and other practices required to achieve this state of brain were also described. The author has also shown that 47 powers of a pure soul in Jainism implies a holographic structure of pure soul which might be relevant to understand shatavdhan like phenomenon also [10]. There are many such practitioners present in India even as on today [3-6]. A current Jain monk named as Ajit Chand Sagarji Maharasahab has given demonstration of even upto one thousand avadhans in front of general public and media and television [1-3]. Its video in Hindi is available on Youtube which indicates a great power of brain which should be explored for its use in day-to-day life [11]. Some neurological concepts are also mentioned by Vaishnavi S [4].

In this paper, maha-shatavdhan (Great Shatavdhan numbering 500-1000 activities are being describes in detail. It is also proposed that concept of "Order" defined in non-linear and non-equilibrium thermodynamics and General Systems theory, are also discussed which are better used to understand living systems may have a direct bearing with spiritual evolution and hence shatavdhan and its higher states [12-15]. This could be an ordering mechanism of brain and consciousness as well. Even concept of quantum coherence emerging because of collective oscillation of millions of tubulins in microtubules in thousands of neurons in different parts of the brain might play a role in advanced performance involving large number of avadhans [16]. It is suggested that some scientific studies may be carried out on such practitioners like normal physiological parameters along with MRI and fMRI to see how different their brains become after training of shatavdhan (and higher number of avadhans) over years, (from those of normal human beings). If thousands of persons are taught this technique, then their memory, attention and concentration will dramatically increase, which will make them more healthy, happy and good decision makers and in turn, the society will become healthy, calm and peaceful and more spiritual as the conditions required to make them master in this field will make them calm and peaceful and internally happy also because of spiritual powers.

*Corresponding author

Surendra Singh Pokharna, Former Scientist, Indian Space Research Organization, Dr. Daulat Singh Kothari Institute for research and Education, Udaipur (Rajasthan). India.

Received: August 05, 2026; **Accepted:** August 10, 2026; **Published:** August 19, 2026

Keywords: Avadhan, Shatavdhan, Shatavdhani, Shastraavadhan, Memory, Attention, Concentration, Multi-Tasking, Sequencing, Order, General Systems Theory (GST), Non-Linear and Non-Equilibrium Thermodynamics, Self Organization, Living Systems, Neurons, Microtubules, Tubulins, Parallel Processing, Quantum Coherence

Introduction

India is known for spiritual systems of different types associated with different religions like Hinduism, Buddhism and Jainism

etc. Yoga, Pranayam and Meditations of different types are well known throughout the world. Even some scientific studies have been also carried out on them in general and on Transcendental Meditation (TM) of Maharishi Mahesh Yogi in particular [17]. (Many other references are available on the internet and google) The physiological effects of these practices on human health in general and blood pressure, heart beat, skin resistance, gamma coherence, ECG, EEG and MEG patterns have been also studied. However, Shatavdhan is a purely mental process, such that a practitioner of shatavdhan, known as a Shatavdhani) develops an

extra ordinary memory, capable of remembering several questions and their answers, participate in many widely different activities, of different types, listen random sound signals and do multitasking, created by some audience and participants [1-6]. A Shatavdhani keenly observes them and can remember and recall them in the same sequence, reverse sequence or random sequence at the end of a given session or even later in near future. Shatavdhan consists of two words, viz. shat and avadhan. Shat in Sanskrit means one hundred and avadhan means an activity in which sharp attention and deep concentration of mind are required. Shatavdhan is quite advance spiritual practice, but very popular among Jain monks from ancient past. However, many non-Jain experts have also picked it up. Table 1. Shows a number of great shatavdhanies in past few hundred years in Jain religion A recent compilation of work done in the past is summarized and published by an intensive effort of Indian Knowledge System (IKS) Division of Ministry of Education, Government of India [3-6]. Pokharna has argued that Shatavdhan could be a new state of consciousness [1,2]. Sampadanand Mishra has described types of these avadhanas in "Wonder that is Avadhanam", Vaishnavi has described many related issues with avadhan in "The art of avadhan", which include how to learn avadhan, what factors are involved in learning like sociological, psychological, spiritual practices and neuroscientific perspective etc [3,4]. Pattaniak Prateek has described Avadhana tradition in Odisha state of India and in other states, whereas Surbhi Bhagat has described many Jain shatavdhanies in the history of about 2000 years and also those who mastered this faculty in last few years in different sects of Jainism [5,6]. Some details about these Jain monks are given in Table 1. Their numbers are quite significant. (However, this book is in Hindi).

Some monks could practice even upto 500 and 1000 activities or avadhans or even more. However, this power is not confined to monks only. But ordinary persons can also pick it up with rigorous practice and a disciplined spiritual life. This paper briefly summarizes this interesting phenomenon and some concepts of science which may help in better understanding of them.

An attempt is then made to explain and understand, foundation of such a capability through evolution of consciousness and powers of soul (aatma) as described in Jainism. Actually, Jain religion is well known for its logical and rational approach to understand several phenomena of nature. (Appendix 1 provides brief description of Jainism). Such a study may provide new capabilities of the human brain not much explored in the field of medical and psychological sciences.

Materials and Methods

This paper is based on some interesting observations of brain power known as Shatavdhan from ancient Jain religion of India So material consists of past literature which describe information about shatavdhan and shatavdhanies and their capabilities in past including the type of practices. However, only few details of the activities are available. But some normal persons in general and some monks in particular are still there today in India who have this extraordinary brain power. Shatavdhan consist They are Shat and Avadhan, Shat means one hundred and avadhan means to focus on certain activities which requires extra ordinary attention along with deep concentration of brain over a long time. Thus, Shatavdhan is a capability to observe one hundred

different activities or tasks, some questions, spoken words, or rhythms or objects (even pictures) displayed by many persons in different ways and may involve even simple mathematical computations which they remember for a long time and recall them in the same sequence or reverse sequence or random sequence even after a long time in future. One who reaches the stage of shatavadhan is called Shatavadhani. However, those who can perform 500 avadhans are known as ArdhaShastraavdhan and process is known as Ardha Shastraavahan (Ardha means half and Shastraavdhan means one thousand), whereas those who can go up to 1000 avadhans are known as Shastraavadhani (Shastra means one thousand and process is known as Shastraavdhan). This unbelievable power has been attained by a handful of persons over the human history, because it occurs during a very advanced stage of spiritual development. But only brief documentation is available of such great masters. When one is able to have self-control of highest order and a pure spiritual life with minimum use of material resources (no personal house, no job, no currency and minimum clothing), strictly following celibacy, only vegetarian diet, extra ordinary respect for his or her spiritual Guru (teacher who has taught this technique). Worshipping of deity Saraswati of Vidhya (knowledge) and few others. Vaishnavi describes such requirements in detail [4]. To maintain silence for several years may further strengthen the whole process. However, one thing is common among all experts and it is that they are all great scholars in their respective fields and have produced many important documents in their life on different subjects and many of them have already good memory and remember many scriptures with hundreds of sholakas or poems in different languages like Hindi, Sanskrit, Prakrit and others.

According to the modern scientific belief, a normal human being utilizes hardly 2% to 3% of his total mental potential. A common man can hear and observe many things but can remember just 4 or 5 sentences or pictures only in the same sequence [18]. Anyone with exceptional intellect and good practice can extend this number from 4-5 to 10-11. However, taking this number to one hundred is beyond the powers of ordinary persons. Actually, new persons learn the whole process very slowly and, in the beginning, they can easily go up to 8 activities and then go upto higher number of activities with rigorous practices and education. Mishra has gathered twenty-one types of distinct avadhans [3]. Some of them are Poetry avadhan, Music avadhan, Astrology avadhan, Bell ringing avadhan, Hand movements avadhan, Mathematical avadhan, Sound avadhan, Visual arts avadhan, Medical avadhan (Vaidya avadhan, is a type of avadhan in which an avadhani navigates through questions related with medical science, demonstrating a holistic grasp of health and healing), Here too one enjoys the poetic beauty of the Ayurved Acharyas [3].

That is the reason that history can name only countable shatavdhanies, whose activities are documented. Documentation of shatavdhanies is extensively discussed in Sampadanand Mishra, Vaishnavi, Pattnaik, Surbhi Bhagwat [3-6]. But details of activities of old experts are not available. However, Surbhi Bhagat has given names of some oldest shatavdhanies (Table 1) who were followers of Jainism. But there are experts from other religions also, whose names are given in Pattnaik and Sampadanand [3,4]. Religion may not be criteria, but only spiritual development seems to be an important condition.

Table 1: Some Prominent Jain Monks Who were well known Shatavdhanies or Maha Shaavdhaniis (Some of Whom could do more Avadhans than One Hundred)

SN	Name of Shatavdhani	Approximate Period (Years in AD)	Number of Avadhans
1	Aacharya Siddha Sen Divakar	4 th Century AD	100, exact not known
2	Aacharya Samantbhadrs	550 AD	100, exact not known
3	Aacharya Haribhadra Suri	8 th Century AD	100, exact not known
4	Aacharya Amrut Chandji	10 th Century AD	100, exact not known
5	Acharya HemChandracharya	1088 AD	40
6	Shri Dharma Ghosh Suri	1236 AD	100
7	Muni Sundar Surishwar ji	1409 AD	1000
8	Upadhyaya YashoVijay ji	1618 AD	NA
9	Muni Shri Chmpalal ji	1929 AD	1000
10	Muni Shrichand ji, 'Kamal'(Lotus)	1930A D	1500 (highest record)

Results

Example 1: Shatavdhan

A world renowned, popular shatavdhani of the present era was Shri Raj Chandji, (Figure1) teacher (Guru) of Mahatma Gandhi. Mr. Gandhi is well known for nonviolent agitation for getting freedom of India from England [9]. Mr. Rajchand was born in Gujarat. Gandhi tested his teacher (Shrimad Rajchand) for this capability of Shatavdhan) and was very impressed by him and also learned principle of non-violence, which he used for the above-mentioned non-violent struggle. Shrimad Rajchandji was born in November 9, 1867 in Gujarat state of India. He also had a memory of his past life when he was just seven years old [8].

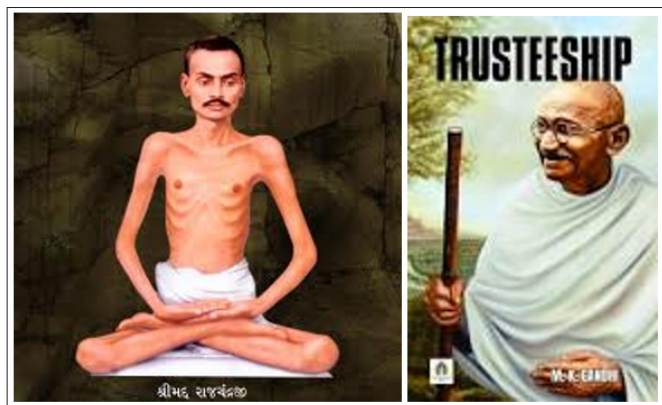


Figure 1: Shrimad Raj Chandji (Left), Teacher of Mahatma Gandhi (on Right)

The procedure adopted by Shrimadji in giving these demonstrations of his rare powers was indeed most exacting. He started with 4 avadhans then slowly increased it to 12 and then sixteen and then up to 52 whose documentation is available. In one demonstration, he could carry out fifty-two activities in a sequence [8,9]. He would begin all the fifty-two activities in one period of attention. He would attend to a portion of each task at a time. He will then attend another second task, next move on to yet another third task, fourth task, and so on. After some time, he would return to the first task. He would cover these rounds, one after the other,

until he had covered all the fifty- two tasks. “He performed 52 *Avadhāna* “ in Botad (a village in Gujarat) in a private meeting with his friend Harilal Shivalal Sheth which included playing *Chopat* game (similar to modern Ludo) with three players (count of activity 1); playing cards with three players (count of activity 1); playing chess with one player (count of activity 1); keeping count of the sound of a small gong; mentally computing arithmetic operations involving addition, subtraction, multiplication and division (count of activity 4); keeping count of the movement of beads along a thread (count of activity 1); To compose verses on sixteen diverse topics selected afresh, and in different forms chosen by various referees (count of activity16), solving eight new problems; composing verses on eight diverse topics selected at the same time and in the specific metre, chosen by various members of the audience (count of activity 8); rearranging 400 words of various languages spoken in random order including Greek, English, Sanskrit, Hindi, Arabic, Latin, Urdu, Gujarati, Marathi, Bengali, Maru (Rajasthani, my mother tongue), Jadeji, in the right order of subject, predicate (count of activity 16); teaching a student; contemplating various figures of speech (count of activity 2); all at one time” The author feels that all these activities are almost going on in parallel. More research is required to know exactly this process as extensive details are not available. He made it a rule not to put down anything on paper while attending to these activities, nor to take any notes and to ask anyone to repeat anything. In 1887 AD, Shrimadji reached the peak of his achievements in this direction. He was in Mumbai at that time. There he gave a demonstration of his powers for simultaneous mental attention, covering a hundred different activities (As this is an old example, details of one hundred activities could not be found). He gave these demonstrations at different centers including Faramjee Cowslip Institution at Dhobi Talao in Mumbai. The demonstration of powers to attend to a hundred different activities simultaneously earned him a tremendous amount of respect and admiration all around. People were profoundly impressed by his extraordinary mental powers. Details of these 52 avadhans is shown in Table 2. It may be mentioned that Shri Rajchandji was not a monk, but an ordinary man who was doing business of diamonds but had a very spiritual life of Jain religion.

Table 2: List of Activities that Could be Carried by Shri Raichandji One after the Other Without Using any Pen or Paper

Activity	Number
1. To play the game of chopat, a kind of checkerboard, with three different players	1
2. To play cards with three different persons	1
3. To play chess with one person	1
4. To keep a tally of the chimes of a Zalar (beads of a circular string)	1
5. To Keep computing sums mentally invoking addition, Subtraction, multiplication and division	4
6. To count the beads on a thread	1
7. To compose verses on sixteen diverse topics selected afresh, and in different forms chosen by various referees	16
8. To answer about eight new riddles	8
9. To recall four hundred words given at random from languages including Greek, English, Sanskrit, Arabic, Latin, Urdu, Gujarati, Marathi, Bengali, Rearranging them in proper order such as subject, object etc. all the while attending to various other activities. (He did not know some languages)	16
10. To explain certain things to a student	1
11. Commentary on certain items of figures of speech	2
Total activities =	52

Example 2: Shatavdhan: One Hundred and Eight Avadhans by Ajit Chand Sagarji Maharasahab

There have been some other examples also but are not well documented so are not mentioned here. Most of them are Jain monks (male as well females) of different age groups. So, after one hundred and twenty-five years of performance of the Shrimad Raj Chandra at the age of 19, another Shatavdhani is creating history and giving public demonstration of this power with full confidence even in presence of media and television (so exact data are available), and again in the same age range. Pujyaniya Ajeet Sagar ji Maharasahab was just 19 years old (in 2008) (Fig. 2, in which Shri Ajit Chand Sagarji Maharasahab is sitting on the left side and his Guru Pujyaniya Ācārya Shri Naya Chand Sagarji Maharasahab is sitting on the right side) and is strictly following celibacy and has not spoken from last few years. But he has developed great memory by remembering almost all Jain scriptures (32 Agamas in number). So, his memory was already very good. He could reproduce not only one hundred observations but one hundred and eight observations in ascending, descending and random order in the first public demonstration. The details of activities are given in the Table 3. This demonstration was done twice in Ahmadabad (Nov 16, 2008 and January 9, 2009). The former was held in the Town Hall and the author was present there. On March 4, 2012, he gave a demonstration of even 200 (known as dwishatavdhan, dwi means two) activities including questions and observations situations and events in Shan Mukhanand Hall in Mumbai (and again the author was present there) in presence of around 5000 persons, television and media. It was a mind-boggling experience for a scientific mind. Many scientists were also present in that programme.



Figure 2: Shri Ajeet Chandji Maharasahab (Left) with his Guru Ācārya Naya Chand Sagarji Maharasahab, who is Checking Results of all Activities in a Register



Figure 3: Author (Second from Left) with Shri Ajit Chand Ji Maharasahab (Second from Right) with a Young Monk (First from Right) and another Disciple (First from Left).

Most of the activities in Table 3. are self-explanatory,

Table 3: Details of One Hundred (actually 108 activities, (Simple Question Answer, Simple Poetries, by Pujyaniya Shri Ajeet Chandra Sagarji Maharasahab

Item No.	Detail
1 to 10	One-Line sentences may be in questioner form
11-20	Words of Wisdom in a sentence of 5 to 7 words
21	First line of a Sanskrit Shloka
22 to 30	Synonym or Antonym in Gujarati (an Indian language)
31	Second line of the same Sanskrit Shloka (activity 21)
32 to 40	Idioms
41	Third line of Sanskrit Shloka (in continuation of activity 21 and 31)
42 to 50	First line of any Sanskrit Shloka.
52 to 60	Names of any famous priest, religious book or place.
61	A mathematical miracle
62 to 70	Name of any philosopher, scientist or patriotic person
71	First part of 16 Blocks- mathematical miracle (Magic square of 4x4 dimensions).
72 to 80	See and Remember (Darshan Avadhan) Darshan means to view for few Seconds (objects like pen, mobile, handkerchief, coin, a currency note etc.
81	Second part of 16 blocks- mathematical miracle (continuation of activity 71)
82 to 90	See and Remember (Darshan Avadhan), another set of objects.
91	9 Blocks- Mathematical miracle (magic square of 3x3 dimensions)
92 to 99	Mathematical calculation with 8 persons
100	Day of the Birthday of great and popular men and women.
101-104	A line from Jain Religious song or cultural song or any patriotic song
105 to 108	Shlokas from Jain Aagams (scriptures)

Example 3: Demonstration of 500-1000 Avadhans

Later on, this Maha-satavadhani (Maha in Hindi means great) extended these numbers upto 500 avadhans and even upto 1000. This is no less than a great miracle, but actually it is a demonstration of spiritual power and disciplined life of highest order. The author has seen the live demonstration of 500 avadhans (Table 4), whereas the one of 1000 (Table 5), he (author) had seen on Television as it was a public show. The details of 500 avadhans is given below in Table 4. Video recording of performance covering 1000 avadhans (Table 5) is given on the youtube, which is there in Hindi but can be seen by anybody for this phenomenon.

<https://www.youtube.com/watch?v=IAL8crHIJHc>

Table 4: Details of Five Hundred Avadhans (Items whose Question Answers or Mathematical Items in Different Sequences by Pujyaniya Shri Ajeet Chandra Sagarji Maharasahab

Item No.	Detail
1-10.	One may ask any question in 5 to 7 words (in English, Hindi or Gujarati language)
11-20.	Quotable quotes in 5-7 words. (in Hindi or English).
21-40.	State any word and its similar or opposite word.
41-60.	Name of any Jain or any non-Jain Saints or scriptures.
61-80.	Name of Scientists, Philosophers and Patriots.
81-89.	Names of famous monuments in India or the World.
90.	Totalling sum of five numbers
91-99.	Total of nine numbers in a 9x9 magic square. (nine activities)
100.	Totalling of remaining 6 numbers.
101-130.	Any object to be shown in any random sequence by a questioner (Like a Pen, Pencil, Water glass, Mobile, handkerchief. Purse, Bottle, Book, coin etc. etc.(known as Avadhan of sight).
131-140.	Solving 10 simple mathematical puzzles simultaneously.
141-150.	First line of Panch Pratikramana sutra or Nava Smaran Sutra (Two famous Jain Practices recommended for daily spiritual living).
151-160.	Name of any month in Hindi or English.
161-170.	Names of Famous Authors or Philanthropists.
171-175.	Names of International currencies.
176-200.	Photographs of 25 leaders to be shown collectively on a chart paper for few seconds. He will speak names of these leaders in the end. (test of photogenic memory).
201-210.	Any number (1-99)
211-220.	Names of trees
221-230.	Names of fruits.
231-240.	Names of Holy Festivals, Public festivals and National Holidays.
241.	A sentence in 5-7 words in any foreign language.
242-250.	One line of a famous poem.
251-265.	Fifteen Collective Avadhans
266-270.	A word from any world language (4-5 words or characters).
271-275.	Name of any holy agamas (Jain scriptures out of 32).
276-300.	A Chart showing 25 pictures of wonders of India.
301-325.	25 Sanskrit words.
326-350.	25 Gujarati words. (Gujarati is a language).
351-375.	Names of states of India or any country in the world.
376-400.	25 simple mathematical puzzles solved simultaneously.
401-430.	Any of 30 objects shown successively like mobile, purse, pen, water glass, stick, book etc. objects could be same or different in sequence as mentioned in sequence 101-130. (Avadhan of sight). There is a real complication as mixing is possible with those shown in 101-130, so it is a big challenge.
431-440.	Names of some pilgrimage centers.
441-450.	Names of famous Yoga Asanas (Yoga postures).
451-475.	Combined Pictures of 25 wonders of the world shown simultaneously on a single chart paper for few seconds.
476-480.	Demonstration of collective mathematics.
481-489.	Total of selected 9 numbers in a magic square of 9x9 dimensions. (Known as Sarvto Bhadra Yantra in Jainism, this is also known as magic square or Ramanujan magic square).
490.	Filling of 25 blocks of 5x5 Sarvato Bhadra Yantra.
491-495.	First line of any shloka of 15 chapter of Bhagwat Gita or of Narad Bhakti Sutra.
496-499.	Postulates from any Jain Holy scriptures known as Aagamas (32 in number are there). Ask for the event or description. Muni Shri will recite the relevant part (known as a gatha).
500.	Any six digit number.

Sarvao Bhadra Yantra: This is name of the so-called magic square of different dimensions (3x3 or 4x4 or any higher number. In case of 1000 avadhans, a matrix of $15 \times 15 = 225$ numbers are also used.) such that sum of any row or any column or any diagonal line is same. Thus, in the first magic square of 3x3 dimensions, the sum is 15 and for the other magic square of 4x4 dimensions, it is 34. Such magic square is also known as Ramanujan Magic Square. These squares are assumed to have very auspicious properties and commonly displayed in Jain homes and in shops.

Magic Square (3x3), Sum of any row or column or any diagonal is always= 15

8	1	6
3	5	7
4	9	2

Magic Square (4x4), Sum of any row or column or any diagonal is always = 34

Scientific Understanding of Shatavdhan

9	16	2	7
6	3	13	12
15	10	8	1
4	5	11	14

Table 5: List of Questions asked during the Sahasravadhāna (1000 avadhans) Performed by Muni Ajitchandra Sagar Ji Maharasahab on May 1, 2023 at National Sports Club of India (Mumbai)

1. to 10. Ask any question in 5 to 7 words.
11. to 20. Quotable quotes in 5–7 words.
21. to 30. Name of Jain and non-Jain saints & scriptures.
31. to 40. Names of holy mountains, rivers, and pilgrimage centers.
41. to 61. First stanza of Sanskrit Shlok. (Each word is mentioned precisely).
62. to 65. First line of the 16 block (4 x 4) Sarvato Bhadra Yantra (magic square).
66. to 70. Name of Jain terminological words.
71. to 80. First line from a Jain Panch Pratikraman Sutra.
81. to 90. Names of philanthropists, patriots, and scientists.
91. to 100. Names of famous monuments in India or the world.
101. to 121. Second stanza of Sanskrit Shloka. (Each word is mentioned precisely).
122. to 125. Second line of the 16 block (4 x 4) Sarvato Bhadra Yantra. (Second part of Activities 62-65)
126. to 150. Twenty-five photographs of monuments in India or the world selected by the audience.
151. to 175. Total of 25 numbers selected from $25 \times 25 = 625$ blocks by the audience.
176. to 200. Twenty-five mathematical puzzles solving simultaneously.
201. to 225. Any object selected to be shown like a mobile, watch, bottle, glass, mirror, stick, handkerchief etc. (Avdhan of sight).
226. to 250. Twenty-five photographs of great scientists, presidents of nations, and philosophers selected by the audience.
251. to 271. Third stanza of Sanskrit Shlok. (Each word is mentioned precisely).
272. to 275. Third line of the 16 block (4 x 4) Sarvato Bhadra Yantra. 62-65 for first line, 122-125 for second line and
276. to 300. Total of 25 numbers selected from $25 \times 25 = 625$ blocks by the audience.
301. to 330. One-by-one numbers selected by the audience.
331. to 340. Names of holy festivals, public festivals, national holidays, etc.
341. to 350. Names of trees.
351. to 360. Names of fruits.
361. to 375. Collective Avdhan.
376. to 400. Solving mathematical puzzles collectively.
401. to 425. Any object selected to be shown as given above in item 201-225 (Avdhan of sight).
426. to 446. Fourth stanza of Sanskrit Shlok. (Each word is mentioned precisely).
447. to 450. Fourth line of the 16 block (4 x 4) Sarvato Bhadra Yantra. (Other lines are mentioned above: viz. 62-65 for first line, 122-125 for second line and 272-75 for third line.

451. to 460 Names of gods and their symbols.
461. to 470. Names of months in Gujarati or English.
471. to 475. Any word in any language (5–7 words).
476. to 500. Total of 25 numbers selected from $25 \times 25 = 625$ blocks by the audience.
501. to 510. Names of famous yoga postures.
511. to 520. Names of countries of the world.
521. to 530. Names of Indian states and union territories.
531. to 540. Names of famous languages in India or the world.
541. to 550. Names of holy Agamas.
551. to 575. 25 Photographs of Flags of countries of the world shown collectively.
576. to 600. Solving mathematical puzzles collectively.
601. to 625. Twenty-five objects to be shown (Avadhan of sight), they could be different from those given above.
626. to 640. Fourteen Gujarati words.
641. to 650. Ten Sanskrit words.
651. to 675. Twenty-five photographs of India's famous leaders are shown separately.
676. to 700. Total of Twenty-Five numbers selected from $25 \times 25 = 625$ blocks by the audience.
701 to 925. Filling a 15×15 Yantra (Magic square) having 225 entries (numbers.)
926. to 950. Twenty-five objects to be shown (avadhan of sight)
951. to 975. Twenty-Five mathematical puzzles are solved simultaneously.
976. to 980. Fifteenth chapter of the Bhagwat Gita. Here the Audience can say any word from the 15th chapter of Bhagwat Gita and the Ayadhani can recite the whole verse.
981. to 989. Filling nine numbers in the 3×3 block Sarvato Bhadra Yantra.
990. Munishri tells the day from a date selected by the audience.
991. to 997. Munishri recites the relevant extract from the Agamas (Sacred Kalpa Sutra).
998. Filling an 8×8 Yantra.
999. Munishri tells the time of someone's birth (Miraculous Avdhan).
1000. Total number of bells rang during the entire event. (They were all random).

Discussion

Basic Hypothesis of Shatvadhan in Jainism

Concept of Shatavdhan is based on the Jain Theory of soul matter association. Jainism has an interesting concept to explain all properties of all living beings on the basis of a common pure soul present in all living beings along with its association with matter from infinite past. Thus, identical souls are present among all living beings. As per Jainism, a pure soul has infinite knowledge, infinite intuition, infinite bliss and infinite power etc. Thus, a pure soul has knowledge of the whole universe and its contents from past, present and future. But a lay man cannot access this knowledge because the fine matter associated with a pure soul obstruct this infinite knowledge. Furthermore, Shatavdhan depicts only a very small part of this infinite knowledge. As per Jainism, there are five different types of knowledge. They are knowledge due to one's own mind is known as *Mati jnana*, knowledge acquired through reading books and listening to others like teachers (Guru is the word used for teachers in India), is known as *Shruta Jnana*, Clairvoyance, which is beyond space and time is known as *Avadhi Jnana*, knowledge of others mind like Telepathy (*Manah Paryaya Jnana*) and an absolute knowledge (Keval Jnana), which is unique concept in Jainism. The concept of knowledge being associated with consciousness (Soul in Jainism) is quite similar to the work of Zeleznikar Anton P (1997), who argues that information must be an important property of consciousness. But an ordinary worldly soul does not perceive this infinite knowledge of soul due to association of the pure soul with fine matter from infinite past [19-21].

So, a pure soul is infected by the presence of matter of different types and in different quantities in different living beings. Hence differences are there among different living beings. But otherwise, there is an underlying unity among all living beings due to the presence of a pure soul present in all living's beings. So, Jainism does not believe in Darwin's principle of "Survival of fittest", but rather state a rule like "Live and Let Live", so Jain monks avoid killing even a small insect in their daily life and hence they are pure vegetarian and so have an excellent spiritual life. Execution of higher number of avadhans's is probably related with this life style. The matter which is associated with soul is termed as karma. The Karma in Jainism is not an action as in Hindu philosophy in general and Bhagwat Gita in particular but is a special type of fine matter which is associated with a worldly soul from infinite past [10,19]. The current birth of a living being is just one life span of a living being. It has passed through thousands of such births in past and will again pass through several thousand lives in different life forms depending on its past activities and present activities. Karmas are of eight different types with 153 sub types and they obstruct different attributes of a pure soul, including its knowledge. Hence each living being has a potential to evolve and get rid of all these past karmas over different life times. But, a worldly *ātma* (an

enlightened *ātmā* but not yet perfect) can also have rich knowledge contents due to spiritual growth and religious practices. Such Jain concepts are supported by Cambridge declaration that small insects like bacteria also have consciousness even without a cortex [22]. Fourteen stages of soul have been defined in Jainism through which one has to progress. So, one moves from a highly disorder stage (with minimum knowledge to a state of perfect order (infinite knowledge).

This adulterated soul passes through different lives through different species (so the concept of life after life is easily explained with Jain concept of soul matter association). Karma matter infects true attributes of a pure soul and hence we feel that our knowledge is limited and restricted. Through spiritual processes one releases most of these karmas attached to one's soul and can then access whole knowledge of the universe. Consciousness as used and interpreted in the modern science and western philosophy is only one attribute of a Jain soul.

Let us now try to understand this phenomenon of Shatavdhan from scientific perspectives from different angles.

Neuroscience Perspective

As per Vaishnavi S who has done basic research in Avadhana, "Avadhana, a complex and multifaceted performance art requiring the simultaneous management of multiple tasks and challenges, engages a broad network of brain regions. While no specific studies have been conducted on Avadhan itself within the realm of neuroscience, we can infer the involvement of various brain regions based on the cognitive demands of the performance [4]. These include areas responsible for memory, attention, language processing, and executive functions.

a) **Prefrontal Cortex (PFC):** The PFC is crucial for executive functions, such as planning, decision-making, multi-tasking and moderating social behaviour. During an Avadhana performance, the Avadhani must plan responses, decide on the most appropriate answers, and manage multiple tasks simultaneously, all of which heavily engage the PFC.

b) **Temporal Lobes:** The temporal lobes, especially the left temporal lobe, are involved in Language comprehension and production. Given that Avadhan involves composing and understanding complex poetry and prose in real-time, these areas would be actively engaged. Additionally, the temporal lobes play a significant role in memory, essential for recalling literary references, rules, and previously mentioned details during the performance.

c) **Parietal Lobes:** The parietal lobes are involved in processing sensory information and managing spatial orientation. They are also crucial for attention. Avadhani must navigate through the spatial layout of the performance area, manage the timing of the responses and shifts attention between different tasks and questions engaging the parietal lobes.

d) **Hippocampus:** The hippocampus is a critical region for memory formation. The Avadhani's ability to recall specific details from literature, previous parts of the performance, or even personal memory relies on the hippocampus. This area is also involved in spatial memory, which could play a role in managing the physical aspects of performance space.

e) **Broca's and Wernicke's Areas:** These areas are critical for language processing. Broca's area, located in the frontal lobe, is involved in speech production and language processing. Wernicke's area located in the temporal lobe, is crucial for language comprehension. Both areas would be highly engaged during the performance as the Avadhani processes incoming

questions, formulates responses, and compose poetry.

f) **Dorsolateral Prefrontal Cortex (DLPFC):** The DLPFC is involved in working memory and cognitive flexibility. It helps the Avadhani keep track of multiple threads of thought and switch between different tasks and topics fluidly, a key requirement in Avadhan.

g) **Cerebellum:** Though traditionally associated with motor control, the cerebellum also plays a role in cognitive processes, including language, attention, and possibly even memory. Its involvement would help coordinate the complex multitasking nature of Avadhan performances, ensuring smooth execution of both physical and mental tasks.

h) **Basal Ganglia:** The basal ganglia are involved in procedural learning, routine behaviours, and motor control. They might play a role in the automatization of certain aspects of the performance, such as meter in poetry, allowing the Avadhani to focus cognitive resources on more demanding tasks.

Understanding the brain regions involved in Avadhana offers a fascinating glimpse into the complexity of human cognitive abilities. It shows cases how deeply integrated and cooperative different brain areas must be to perform such a demanding and dynamic task, blending creativity, memory, language and attention in real time."

Non-Linear and Non-Equilibrium Thermodynamics Which Explains Maintenance of Certain "Order from Chaos" in them

This discipline to study living systems was developed by Ilya Prigogine and Nicolis G. As per this, in all living systems, certain "Order" is maintained through input of certain type of matter, energy and information [12,13]. Just like we take food, oxygen and some information from the external environment such that it helps in our survival. Otherwise, if such systems are left to themselves, then they will end in a state of maximum entropy (disorder and death), just like any physical system. Hence such living systems are known as open systems, constantly interacting with the environment and other surroundings. Certain "Order" is maintained in living systems. This also involves some kind of self-organization and concept of dissipative structures. It appears that spirituality involves self-organization of the total system and the spiritual order is maintained through these spiritual practices, which results into minimization of chaos (both internal as well as external one). The whole process of avadhan probably involves some kind of "ordering of the external inputs, due to this highly self-organized "ordered" system.

General Systems Theory (GST) can better help in understanding Living Systems and Evolution of Consciousness

There are limitations of standard scientific methodology of modern science, when it is applied to living systems, because scientific methodology has been developed mostly for isolated closed physical systems which are passive and not active like living systems [14,15]. This is so because (a) all living systems are active and open systems which constantly interact with the environment and surrounding living beings, (b) they grow and decay, (c) they have properties which cannot be reduced into parts, means they are more than sum of the parts (d) they have memory and so it is not possible to carry out any scientific experiments on them which should be repeatable at different times and at different places, (e) The living systems are irreversible systems. (f) All living systems, are goal directed oriented systems that is they have certain goals in their lives and hence here the effects (goals), determine the causes which should be managed to achieve a given goal and not vice versa in which a cause determine the

effect. Similarly, parameter like energy and momentum defined using conservations laws need not be strictly used to study the active open systems. For living systems, certain “order” is the main parameter which is constantly maintained by supply of external energy, matter and information since they fall in the category of non-equilibrium systems.

Hence General Systems Theory (GST) was put forward for better understanding of these systems. Here information and entropy (or order) are major parameters to describe the living systems. It was then shown that the concept of knowledge is much more general and much broader. It was actually illustrated that the idea of Indian philosophy in general and of Jainism in particular that knowledge is structured in the consciousness needs further exploration in a systematic way [10,19].

Avadhan may also Involve Quantum Physical Phenomena

It appears that a huge parallel processing is also going on in this total process of Avadhan with very high precision and work perfectly in synchronization with one hundred percent accuracy. This requires extraordinary coordination of different parts of the brain, so the concept of fine structure of neurons and their constituents like microtubules and their hyperfine constituents known as tubulins, (which appear to act as a quantum systems) may be playing an important role in producing extra ordinary coordination among different parts of the brain, since millions of tubulins among thousands of neurons might be oscillating together and producing quantum coherence [16].

A New Perspective about Consciousness: Personal Communication from Dean Radin of IONS (Institute of Noetic Sciences, USA) about Consciousness and its Power

Just on June 26, 2026, only I received a personal communication from my friend, Prof. Dean Radin, Chief Scientist at IONS (Institute of Noetic Sciences (CA, USA). What he writes is remarkable and throw more light on Shatavdhan, consciousness and Jainism:

“For decades, we’ve been told that consciousness is just a byproduct of the brain. But our latest research is illuminating a very different reality.

We recently completed a massive analysis of 300 million trials from our long running *GotPsi* database. Using advanced machine-learning techniques, we looked at how unselected, everyday people were able to describe an image before a computer had even selected it.

The results were extraordinarily significant.

What the data shows is that we are not just passive observers of time; we are participants in a reality that is far more interconnected than the old “materialist” story allows. This isn’t just a theory anymore it is a measurable, statistical fact.

When we have this kind of evidence, the “path forward” becomes much clearer. We start to see a world where our intentions matter, where our connections are real, and where our potential is far greater than we’ve been taught to believe”.

This hidden potential clearly comes out in the process of Shatavdhan.

Applications of Shatavdhan for Common Humanity and Students

Practice of shatavdhan results into development of following:
Development of excellent memory and recalling in different sequences with very high accuracy. Also, capability of developing faculty of multitasking different events and or situations.

It induces some orderliness in our brain as one has to follow certain discipline in the whole life.

Increase in creativity and innovation.

Attention and concentration increase in all walks of life.

Increase in capacity to handle wide range of themes like philosophy, poetry, mathematics and literature and develop command over many languages.

It develops ability to adapt to new conditions and manage new situations and even contradictory situations.

This concept partly supports Jain Concept of consciousness.

There will be more successes in personal and professional life.

Develop good communication skill.

Conclusions

Following conclusions can be drawn:

Avadhan and advance avadhan practices is a real phenomenon and help in increasing memory, attention and concentration of any individual.

Avadhan and its practice in daily life can result into development of attention, concentration and Confidence, ability for doing multitasking, good communication skill, acquiring parapsychic faculties and other phenomena, creativity, clarity of mind, highly order state of consciousness.

If a large number of persons learn it and teach it to others also, then there will be more happy society, healthy living, decrease in psychosomatic diseases, less conflicts, more spiritual evolution and reduction in wars and provide new perspective to look at the reality.

Conflict of Interests: None

Acknowledgements: I dedicate this paper to several dignitaries who have encouraged, motivated, appreciated, guided and inspired me for this type of work over last fifty years or so. They include my Parents Shriman Balwant Singhji Sahab and Shrimati Lahar Kunwarji Pokharna, I am indebted to Late Ācārya Shri Nana Lalji Maharasahab, Late Ācārya Shri Tulsi Late Ācārya Shri Nathmualji Swami (Mahapragayaji), Acharya Shri Naya Chand Sagarji Maharasahab, Puyaniya Ajit Chand Sagarji Maharasahab, Acharya Vijay Raj ji Maharasahab, Pujyaniya Yuvacharya Shri Jitesh Muniji.

There are again great personalities who have inspired me. They are Late Padam Vibhusan Shri Daulat Singhji Sahab Kothari, Late Padam Vibhusan Prof. E C G Sudarshan, Several Gurus (teachers) especially Late Prof. Upendra Nath Upadhyaya, Prof. M Venkatesh Dr. Lalit Kumarji Kothari, Dr. Sudhir Shah I am also grateful to Surbhi Bhagat, Dr. Sampadananda Miahra, Dr. S Vashnavi and Prateek Pattaniak for their books which I have frequently used.

The author is very grateful to Prof. Vernon Neppe and Dr. Edward Close for encouraging and explaining their TDVP model to me. Prof. Rupert Sheldrake and Prof. Dean Radin have to be specially thanked for discussion and their presentations in IONS conference of 2019, which has inspired me a lot. I am also very happy to thank Prof. H. Froehlich; F.R.S. (England), (who has referred some of the above work to Prof. B. D. Josephson, Noble Laurette, who has appreciated the work of causality and consciousness and another work of elementary excitations and quantum field theory as applied to biological systems.

Last but not the least, my wife Sunanda, who has sacrificed a lot for me, for not giving her enough time which was due to her, but which I have taken for this work but still she is constantly encouraging me. I could not give time to my children Sunayana, Supriya, Renu, Avani and Anusha also, so an apology to them.

Appendix 1: A brief note on Jainism

Jainism is one of the oldest religions in the world. Jains traditionally trace their history through a succession of twenty-four propagators of their faith known as *Tirthankaras* with Ādinātha as the first *Tirthankara* and Tirthankar Mahāvīra as the last one (about 2500 years ago). For long periods of time Jainism was the state religion of Indian kingdoms and widely adopted in the Indian subcontinent [19, 20].

Jainism, traditionally known as Jain Dharma is an Indian religion that prescribes a path of non-violence towards all living beings and emphasizes on spiritual independence but equality among all forms of life due to presence of a common soul among all of them. The essence of Jainism is “concern” for the welfare of every living being in the universe. Practitioners believe that non-violence and self-control are the means by which they can obtain liberation from movement of one’s soul from one birth to the other and can acquire highest state of consciousness (an attribute of soul). The word Jainism is derived from a Sanskrit verb Jit which means to conquer. It refers to a battle with one’s own passions and bodily pleasures that the Jaina ascetics undertake. Those who win this battle are known as Jina (conqueror). The term *Jaina* is thus used to refer to laymen and ascetics of this tradition alike [23].

As per Jainism, this world consists of six substances, which are Soul (aatma), Matter (Pudgal), Space (Akash), Time (Samay), Medium of Motion (Dharmastikaya) and Medium of Rest (Adharmastikaya). They are independent of each other but all activities of the world are determined by them and their combinations. This description is quite similar to what we find in the modern science.

References

1. Surendra Singh Pokharna (2023) Shatavdhan could imply a new state of consciousness. Journal of Neurology Research Reviews and Reports 5: 1-4.
2. Surendra Singh Pokharna (2022) A comparative study of the concept of consciousness in Science and Jain philosophy, A Project Report submitted to Indian Council for philosophical Research (ICPR), Govt. of India, New Delhi 82-84.
3. Sampadanand Mishra (2025) The Wonder that is Avadhanam, Published by Indian Knowledge System (IKS Division), Ministry of Education, Government of India, also available at Khanna Book Publishing Co, (P)Ltd. Dariyaganj, New Delhi (India) 59-64.
4. Vaishnavi S (2025) The art of Avadhan, Published by Indian Knowledge System (IKS Division), Ministry of Education, Government of India https://khannabooks.com/product/the-art-of-avadhanam-unveiling-the-secrets-of-human-attention-and-money/?srsltid=AfmBOopZ88kr9dk68KJyt9VQCnKt_10tkeurRnXDkrpZMSJjVC0cxt.

5. Pattaniak Prateek (2025) Avadhana tradition in Odisha, Published by Indian Knowledge System (IKS Division), Ministry of Education, Government of India <https://www.amazon.in/Avadhana-Tradition-Odisha-Prateek-Pattanaik/dp/9355384416>.
6. Surbhi Bhagat (2025) Jain Dharma Me Avadhan (Hindi) Published by Indian Knowledge System (IKS Division), Ministry of Education, Government of India <https://www.amazon.in/Jain-Dharma-Avadhana-Surbhi-Bhagat/dp/9355389345>.
7. Kālarthy Mukul (2004) Shrimad Rajchandra, A Biography, Abridged, Book-I, Translated by Digish Mehta, Shrimad Rajchandra Ashram, Agas, Gujarat, India 19.
8. Wikipedia en.wikipedia.org/wiki/Shrimad_Rajchandra.
9. https://en.wikipedia.org/wiki/Mahatma_Gandhi.
10. Surendra Singh Pokharna (2022) Atma, Soul in Jainism Described as a Hologram, in Proceedings of an International Conference on Exploring Consciousness: Non- Duality to non-locality organized by India Foundation, New Delhi in association with the National Institute of Mental Health and Neurosciences (NIMHANS, Bangalore) from September 22-24, 2022. Editors, Come Carpentier and Anmol Mahajan 74-122.
11. <https://www.youtube.com/watch?v=IAL8crHIJHc>.
12. Prigogine, Ilya Nicolis G (1977) Self-Organization in Non-Equilibrium Systems. Wiley 491.
13. Prigogine, Ilya and Isabelle Stengers, Order out of chaos (1993) Man’ new dialogue with nature, Flamangio 564.
14. Bertalanffy, Ludwig Von (1976) General Systems Theory, Foundation, Development, and Applications, Amazon Publishers 19.
15. John P van Gigh (1978) Applied General Systems Theory. Harper and Row Publishers 36-45.
16. 16. Roger Penrose, Stuart Hameroff (2017) Consciousness in the Universe: Neuroscience, Quantum Space -Time geometry and ORCH OR Theory, in “Consciousness and the Universe: Quantum Physics, Evolution, Brain and Mind, by Roger Penrose, Stuart Hameroff and Subhash Kak, Cosmology Science 17-26
17. <https://pmc.ncbi.nlm.nih.gov/articles/PMC2211376/>.
18. <https://pooq.app/en/blog/sequence-memory>.
19. Kachhara NL (2014) Scientific Exploration of Jain Doctrines (in 2 parts), Motilal Banarasidass Publishers New Delhi 45-36.
20. (2013) Jain eLibrary has several books on Jainism (jainelibrary.org) in Hindi and English and many other languages <https://jainelibrary.org/>.
21. Zeleznikar Anton P (1997) Consciousness as Informational Phenomenalism: An Informational, Phenomenological, Philosophical, Neural and Quantum-Mechanical View. Informatica: An International Journal of Computing and Informatics 21.
22. Low P (2012) The Cambridge Declaration on Consciousness, Proceedings of the Francis Crick Memorial Conference, Churchill College, Cambridge University 1-2.
23. Dean Radin (2026) Personal communication from IONS <https://noetic.org/jre-dean/>.

Copyright: ©2026 Surendra Singh Pokharna. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.