

Title page

Dayalbagh Science of Consciousness(DSC)

**IMPACT OF DAYALBAGH WAY OF LIFE ON GROWING INFANTS AND
CHILDREN
VIA PARENTS AND SUPERVISORS**

Anjoo Bhatnagar M.D.^{1*}, Vijai Kumar M.D., M.R.C.P. ^{2**}
And team of Saran Ashram Hospital Doctors^{3***}

Author affiliations

^{1*}Anjoo Bhatnagar M.D.

¹Consultant Pediatrician, Saran Ashram Hospital, Dayalbagh, Agra 282005, India
(2013-continuing)

²HOD, Pediatrics, Fortis Escorts Hospital, Faridabad, Haryana, India (1985-2013)
dranjoo@gmail.com

^{2**}Vijai Kumar M.D., M.R.C.P.

¹President Saran Ashram Hospital, Adviser Medical Education and
Healthcare Practice, Dayalbagh, Agra 282005, India (2005-continuing)

² Medical Director, Jaslok Hospital and Research Centre, 15 Dr. G Deshmukh Marg,
Mumbai (2002 to 2005),

³Director Professional Services, PD. Hinduja National Hospital & Medical Research
Centre, Mumbai (1994 -1999)

⁴Head Air India medical services (1975 to 1994)

amodkumar1@gmail.com; v.sunrise999@gmail.com

^{3***}Team of Saran Ashram Hospital Doctors (S-1)

Contact for correspondence ^{2*}Dr. Vijai Kumar Advisor, Medical Education & Health
Practice, Sabha Complex, Dayalbagh, and Agra – 282005 India
Email ID: amodkumar1@gmail.com; v.sunrise999@gmail.com
Mobile No. - 919359546630

Dayalbagh Science of Consciousness (DSC)

IMPACT OF DAYALBAGH WAY OF LIFE ON GROWING INFANTS AND CHILDREN VIA PARENTS AND SUPERVISORS

Abstract

In a first of its kind experiment in the world, infants and children, three weeks to three years of age were exposed to full spiritual and everyday life of the unique colony of Dayalbagh, and constituted the voluntary SantSu(Perman) Evolutionary Scheme, which enjoined them to participate in congregational prayers, selfless service (*Seva*) in fields, healthcare exercise, and marching past the Supreme Spiritual Leader both morning and evening.

The parents and supervisors observed, accelerated growth and development of children participating in the SantSu(perman) scheme. The findings were confirmed by the pediatrician in the group early in the study(Phase I), comprising of a Longitudinal Observation of the infants and children living in Dayalbagh and voluntarily participating in the above Scheme (experimental group n=68). Their growth parameters at entry and exit in the scheme were compared with age matched control group (n=41) children. In phases II and III, the study is being extended to different centers in India and abroad, respectively, through our global network of 462 ± 1 nodes. To protect against COVID 19, experiments have been conducted and safe, effective and economical method of sanitization with appropriate UV radiation hybridized with traditional sodium hypochlorite solution spray has been identified for infants and children of the scheme, who remained asymptomatic with no adverse effects with regulated exposure and continued their vigorous daily routine during the pandemic observing universal precautions.

A highly significant increase ($p < 0.01$) of weight, height and, specially, head circumference, was seen in the experimental group during the study. This increase was more marked in experimental as compared to the control group ($t = 4.492, 3.729, 3.920$ respectively for weight, height and head circumference) and intelligence, social, emotional, and spiritual quotients ($t = 6.652, 12.028$ and $z = 4.87, 4.89$ respectively) as well as intuitive consciousness.

Dayalbagh way of life and association with Spiritual Master has a profound impact on the physical parameters and development of intelligence, social and emotional maturity, and intuitive and spiritual faculties of young children. These are clear indicators of the progression of these children as “Superman”, according to the Dayalbagh Science of Consciousness (‘DSC’).

Funding: DEI (Deemed University) and its sponsoring body Radhasoami Satsang Sabha Trial registration number: CTRI/2020/02/023527 India (ICMR-NIMS)

**IMPACT OF DAYALBAGH WAY OF LIFE ON GROWING INFANTS AND CHILDREN
VIA PARENTS AND SUPERVISORS**

Manuscript text

North of the city of Agra in India, in the cradle of river Yamuna, lies a “unique little colony, housed in a town which bears the poetical name of Dayalbagh.....” (Brunton, 1934/1985)(1) freely translatable as ‘Garden of the Merciful’. In its concept the colony blends eastern simplicity and spiritual values with western scientific temper and liberal education. It is the headquarters of the “postmodern” Radhasoami Faith (S-3a). The Nobel Laureate Abhijeet Banerjee’s (S-3d) aspiration of mitigating poverty through experimental means with special emphasis on bringing the female child to the common stage of civil society is amply reflected in Dayalbagh.

The Fifth Revered Leader of the Radhasoami Faith , Sahabji Maharaj , Sir Anand Sarup, after establishing Dayalbagh, taught *Satsangis* (followers of the faith) to lead a corporate life as members of one family and introduced the concepts of ‘better worldliness ’and ‘Superman’ as amongst the community’s ideals.

Life of Dayalbagh residents typically begins at 4 a.m. with *Satsang* (congregational prayers) in the central Hall or the fields , followed by physical training (P.T.) and, later, *Seva* (selfless service to God and man) in Dayalbagh agricultural fields in which young and old, men and women , infants and children and students all participate. After doing routine duties The day closes with evening *Seva* and *Satsang*, presided over by the *Sant Satguru*, an emanation (incarnation) of the Supreme Being Radhasoami. (A monolith of pure spirituality raised to the power ∞ ad infinitum).

Dayalbagh launched a project called ‘The Dayalbagh SantSu(perman) Evolutionary Scheme’ in January, 2017, in which infants and children in the age group of three weeks to three years participate in all spiritual and other unique activities peculiar to Dayalbagh way of life including early morning and evening *Satsang* and self-less *Seva* in the agricultural farms along with their parents or guardians in their own way every day. During field work they receive hot milk to drink and bengal gram to eat.

They also participate in healthcare exercise both morning and evening and march past the Spiritual Head of the community, Revd. Prof. P.S Satsangi , a former Dean of IIT Delhi, and Managing Director, Foundation For Innovation and Technology- Transfer (FITT) and now the eighth Revered Sant Satguru of Radhasoami Faith.

The followers of the Faith and Sant Su(perman) participants are in pursuit of the highest level of spiritual consciousness described by Prof. Prem Saran Satsangi and Dr. Stuart Hameroff (Satsangi and Hameroff 2016) (2) and Bucke’s ‘Cosmic Consciousness’ (Bucke 1905) (3). Bucke’s ‘Cosmic Consciousness’ (Bucke 1905)³.

Early in the study the pediatrician in the group had confirmed the observations of parents and supervisors, of accelerated physical progression of certain parameters and more rapid development of intelligence, social and emotional maturity and intuitive, and spiritual faculties in the infants and children of three weeks to three years of age participating in the Sant Su(perman) evolutionary Scheme(experimental group). The present article is based on these observations and findings, termed as Phase I of the study. The study was registered with the Indian Council of Medical Research, comprising of two further phases: Phase II, a multicenter trial in India and Phase III, a global trial (462±1 nodes).

Material and Methods

After proper approval of research protocol, from Ethics Committee of Dayalbagh Educational Institute (Deemed University), Dayalbagh Agra, the data collection was started in April 2017 and is being continued with the consent of parents /guardians.

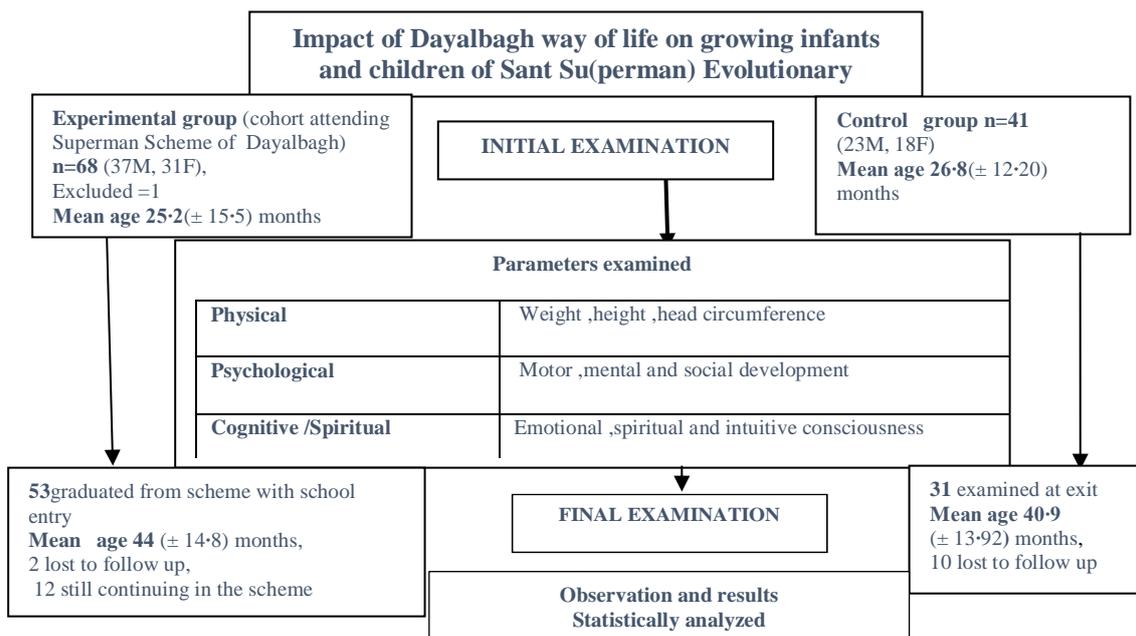
Inclusion criteria-

Experimental group: all infants and children living in Dayalbagh and participating in the voluntary SantSu(perman) Evolutionary Scheme and leading the Dayalbagh way of spiritual life were included in the study.

Control group : comprised of age matched infants and children from amongst those attending the local, charitable , Saran Ashram Hospital for any reason ,except those with major illness. They originated from the same locality as did the experimental group, with similar socio economic status.

Exclusion criteria: Infants and children with congenital disease or disorder, or major illness were excluded from the study. Those questionnaires which were not filled in the meaningful manner were excluded.

Diagram -1 Flow diagram of the protocol of study with numbers and ages of participants



The infants and children in the experimental and control groups of the study were examined by one of us (A B) at the Saran Ashram Hospital , Dayalbagh , in batches of 4-5 on 2 days in a week for assessment of their physical growth (weight , height and head circumference), using WHO (MGRS) growth charts and motor , mental and social development using DASII (Developmental Assessment Scale for Indian Infants : an Indian adaptation of Baley Scale). Stanford Binet Scale was used for assessment of intelligence and Vineland Social Maturity Scale for Social Development. These parameters were recorded at the time of their enrolment in the programme (three weeks or older) and again at intervals and at age three (final examination) and beyond, ending with entry into a formal preschool.

Questionnaire method with parents and coordinators as the responders was used to evaluate the emotional, spiritual and intuitive development of all participants. A four point scale was used for assessment of emotional (S-2 i), spiritual (S-2 ii) and intuitive (S-3 iii) consciousness based on the replies to relevant questions in the questionnaire. The scale was developed by the present researchers with the help of experts. The results were quantified by post graduate students of Cognitive Psychology Department of Dayalbagh Educational Institute (Deemed University) using above mentioned scales in a double blind manner. Emotional Scale included observations on nonverbal expression and communication of emotions by infants below 1 year, and other parameters in older children. Spiritual scale has questions about quality of sleep, morning waking up time, response to *Satsang* environment, *path* (hymns) and field activities with other children and reaction to seeing the Revered Spiritual Master's *Swaroop* (portrait) etc. Intuitive scale has questions about premonitions, imagination, dreams and also about creative aptitude of the child. The various parameters were recorded in both experimental and control groups at entry into the study (initial examination) and compared, using statistical methods, with those recorded at the final examination at the exit age. (diagram1)

Statistical analysis plan (SAP)

Data were analysed using SPSS20-0 software. Comparison of data of experimental and control group of infants and children was done at initial and final examination of participants. Both inter and intragroup comparison of means of different physical parameters (weight, height, head circumference), and psychological parameters (motor, intelligence and social) was carried out using Student *t* test and Confidence Interval computed. Physical parameters of the experimental group at the final round were also compared with z scores of WHO(MGRS) standards for growth for children. Mann-Whitney test was used for analysis of emotional and spiritual quotients. A *p* value of <0.05 was considered as significant. The data of the study were statistically analyzed by Mr. Hazur Saran Srivastava, Statistician, Dayalbagh Educational Institute Deemed University.

Role of funding source We gratefully acknowledge Dayalbagh Educational Institute (Deemed University) and its sponsoring body, Radhasoami Satsang Sabha, a religious and charitable society registered under the Societies' Registration Act of 1861, for meeting requirements of the study as and when required.

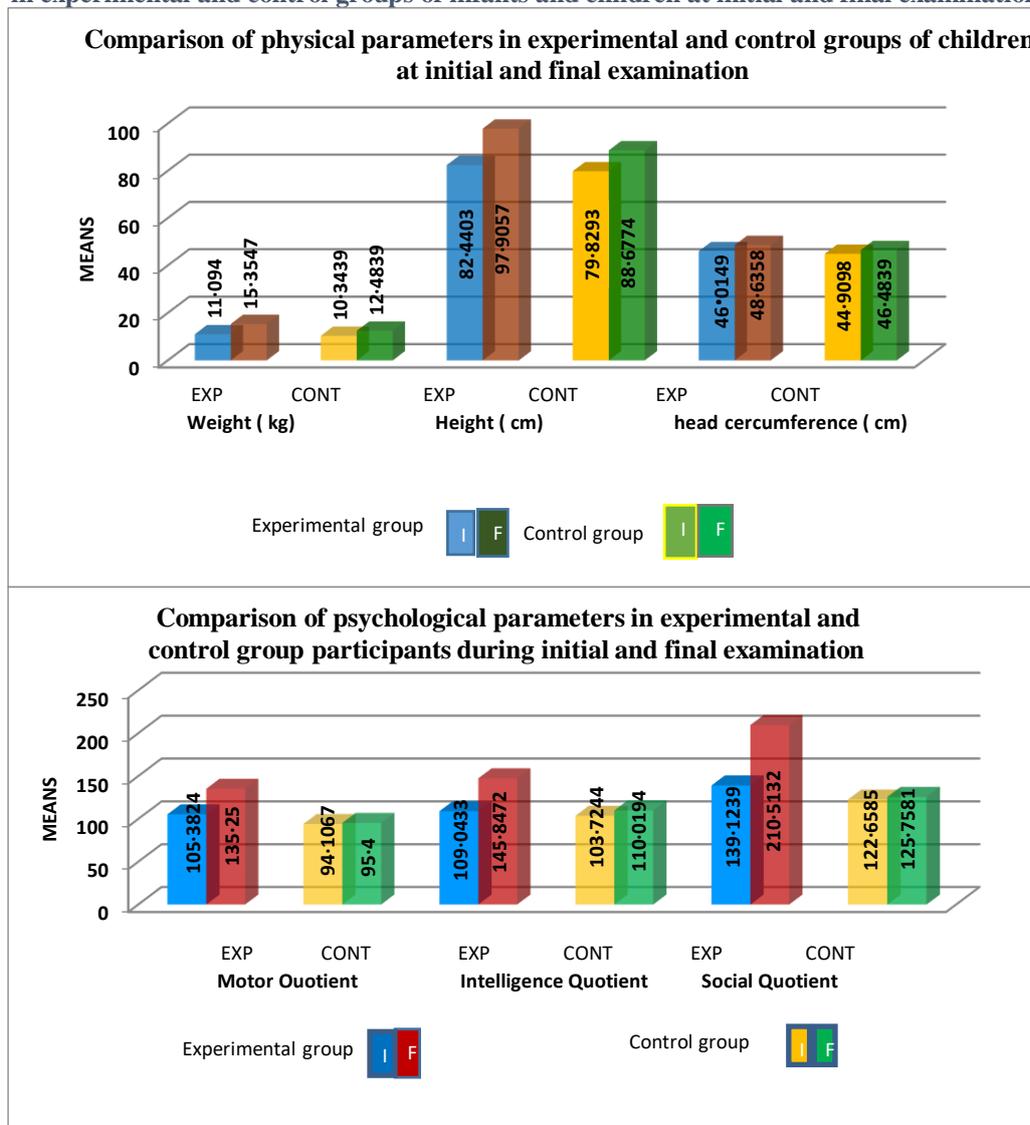
Observations and Results

The statistical analysis of data of Phase I of study reveals following important observations: Intergroup comparison of physical parameters in experimental and control group shows (fig.1, table 1) that there is no significant difference in weight, height and head circumference of the participants in the two groups at the initial examination ($p > 0.05$). Statistically, there was no significant difference in the ages of experimental and control groups at entry and exit, the apparent gap in the ages of the two groups at the final examination being the consequence of the time taken to complete the examination of all infants and children in the experimental group which was carried out in small batches. The two groups were comparable at entry into the study both age wise and anthropometrically.

Table 1. Comparison of physical (weight, height and head circumference) and psychological parameters (motor (MOQ), intelligence (IQ) and social quotients (SQ)) in experimental and control groups of infants and children at initial and final examination

Experimental group							Control group					
	Initial examination	Final examination	Growth	<i>t</i>	<i>p</i>	95%CI	Initial examination	Final examination	Growt h	<i>T</i>	<i>p</i>	95%CI
Mean Wt. Kg. (SD)	11.02 (±3.16)	15.35 (±3.11)	4.34	7.524	.000**	3.21 to 5.46	10.34 (±3.02)	12.48 (±2.65)	2.14	3.196	.002**	0.80 to 3.48
Mean Ht cm. (SD)	82.44 (±14.75)	97.91 (±11.02)	15.47	6.572	.000**	10.85 to 20.08	79.83 (±12.11)	88.68 (±10.90)	8.85	3.251	.002**	3.51 to 14.18
Mean HdC cm. (SD)	46.01 (±3.10)	48.64 (±1.75)	2.62	5.832	.000**	1.74 to 3.5	44.9 (±2.97)	46.48 (±2.75)	1.57	2.325	.023*	0.25 to 2.9
Mean MOQ (SD)	105.38 (±17.95)	135.25 (±16.68)	29v87	3.36	.030*	12.44 to 47.29	94.11 (±20.53)	95.4 (±10.09)	1.29	0.186	0.885§§	12.35 to 14.94
Mean IQ (SD)	109.04 (±19.07)	145.87 (±18.09)	36.83	10.813	.000**	30.15 to 43.50	103.72 (±21.28)	110.02 (±27.08)	6.29	1.069	0.290§§	5.25 to 17.84
Mean SQ (SD)	139.12 (± 43.47)	210.51 (±36.84)	71.39	9.732	.000**	57.01 to 85.76	122.66 (±36.01)	125.76 (±27.39)	3.1	0.415	0.023*	11.55 to 17.74
** $p < 0.01$ ** highly significant ,							* $p < 0.05$ * significant ,			§§ $p > 0.05$ §§ non-significant		

Fig 1 Bar Diagram showing comparison of physical (weight, height and head circumference) and psychological parameters (motor (MOQ), intelligence (IQ) and social quotients (SQ)) in experimental and control groups of infants and children at initial and final examination



At the final examination the *t* test for differences in weight and height for both experimental and control groups was statistically highly significant (** $p < 0.01$). The mean weight of the experimental and control groups at the initial examination was 11.0 kg and 10.3 kg respectively. At final examination the experimental group participants had gained 4.3 kg weight (95% confidence interval 3.21 to 5.46), while those of control group had gained only 2.1 kg (95% CI 0.80 to 3.48). The 95% CI for growth in height of experimental and control group was 10.85 to 20.08 and 3.51 to 14.18, respectively. The growth in head circumference of experimental group was also highly significant (** $p < 0.01$) (CI 1.74 to 3.5), whereas the increase in head circumference in the control group was significant only at 0.05 level (CI 0.25 to 2.9) (figs. 1 and fig2, table 1).

Comparison of intra group rates of growth reveals that the growth was accelerated in the experimental group as compared to the controls; the difference being highly significant for all three physical parameters (** $p < 0.01$), (95% CI for weight 1.6 to 4.1, height 4.1 to 14.3 and head circumference 1.0 to 3.2) (Table 2, fig2, 3).

Table 2: Comparison of difference in rate of growth of Physical and Psychological Parameters in Experimental and Control Groups of infants and children in Final Round

Group	Round	Mean Wt	Mean Ht	Mean HdC	Mean MOQ	Mean IQ	Mean SQ
Experimental	Final Round	15.3547	97.9057	48.6358	135.2500	147.4472	209.6132
Control	Final Round	12.4839	88.6774	46.4839	95.4000	110.0194	125.7581
	<i>t</i>	4.492**	3.729**	3.920**	4.202*	6.652**	12.028**
	95%CI	1.6-4.1	4.1-14.3	1.0-3.2	22.33-57.36	25.15-46.56	70.91-98.58
		** $p < 0.01$		* $p < 0.05$			

Fig.2. Increase in physical parameters in experimental and control groups (weight, height and head circumference with confidence interval)

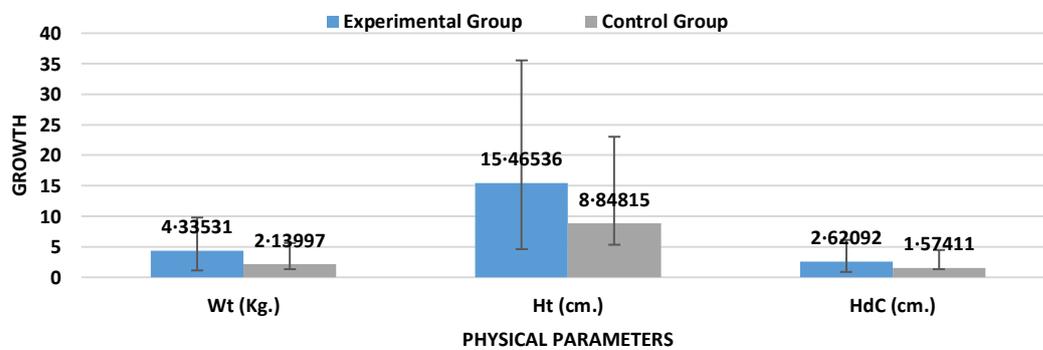
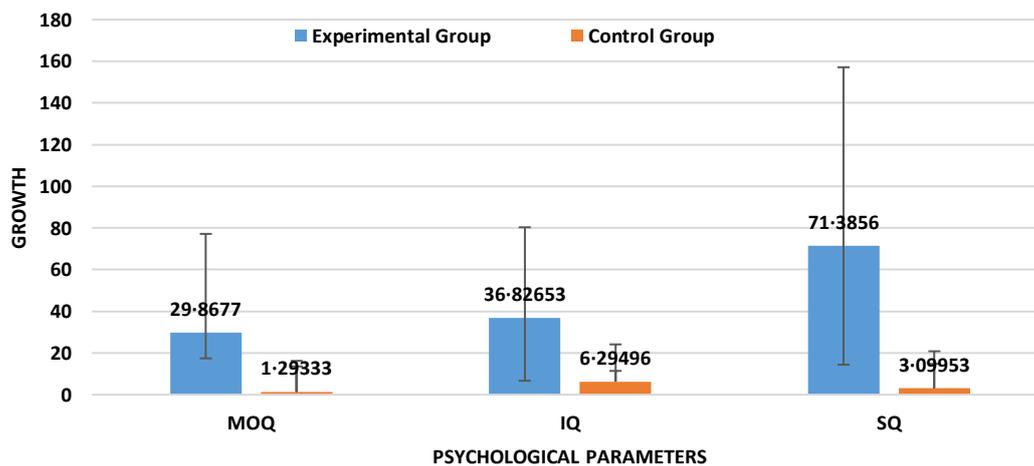


Fig. 3 Increase in psychological parameters motor (MOQ), intelligence (IQ) and social quotients (SQ) in experimental and control groups with confidence interval



The difference was also found to be highly significant for intelligence in the two groups at the final round.

Reference to table 2 and fig. 3 reveals that the increase in intelligence and social quotients, in the experimental group between the initial and final examination was statistically highly significant (** $p < 0.01$), while the increase in motor quotient was significant to a lesser degree (* $p < 0.05$). Inter group comparison reveals, that the rate of increase in intelligence

and social quotient in the experimental group is statistically highly significant, (95%CI 25.15-46.56 and 95% CI 70.9-98.58 respectively) (table 2), while in control group of children, the change is not appreciable.

On comparison of anthropometric characteristics of experimental and control groups at final examination, (table1) with WHO (MGRS) growth standards for infants and children, the Z score is seen to be higher in experimental group for all three physical parameters (weight, height and head circumference) as compared to that of the control group.

Z score	Weight for age (WAZ) numbers (%)		Height for age (HAZ) numbers (%)		Head circumference for age (HcAZ) numbers (%)	
	Experimental group	Control group	Experimental group	Control group	Experimental group	Control group
>-2 Z	nil	9.67%	nil	nil	nil	nil
>-1 Z	60.38%	83.87%	66.04%	83.87%	72.73%	87.1%
> 0 Z	nil	nil	nil	nil	nil	nil
= 0 Z	0.19%	3.26%	nil	nil	2.26%	3.26%
<+1 Z	32.08%	nil	30.19%	16.13%	22.73%	9.68%
<+2 Z	5.66%	nil	3.77%	nil	nil	nil

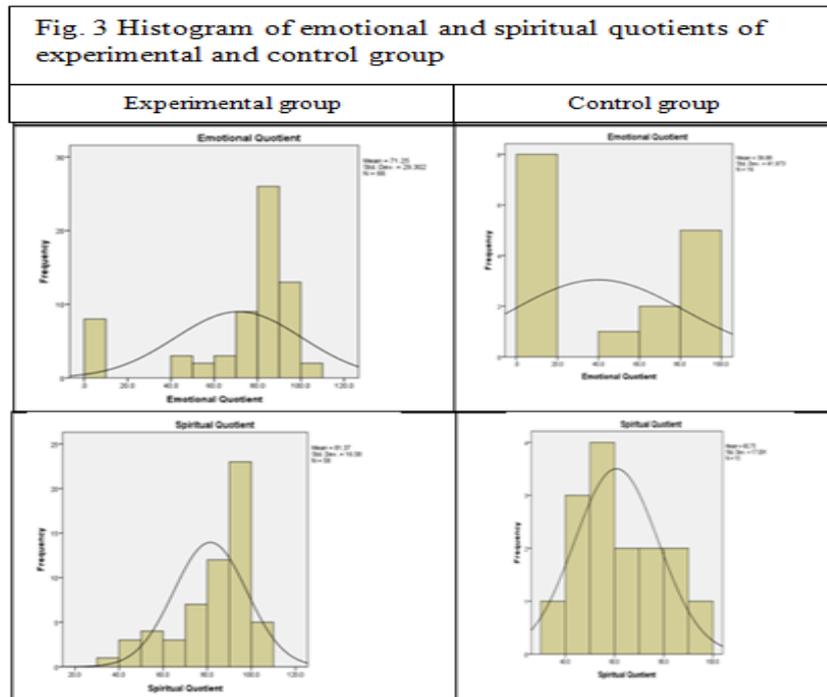
Emotional Behaviour and Spiritual and Intuitive Consciousness

The participating infants and children in the SantSu(perman) Evolutionary Scheme, were under continuous supervision and observation of their parents and supervisors. While it was not possible to quantify these parameters to compare them with control group, a high degree of objectivity was maintained while using questionnaire through repeated counselling of the observers and parents/supervisors and interaction with them.

Statistics	Emotional Quotient		Spiritual Quotient	
	Experimental	Control	Experimental	Control
Mean	71.25	45.00	81.37	60.75
Standard Deviation	29.30	36.19	16.58	17.09
Mann-Whitney U	133.000		49.500	
Wilcoxon W	409.000		169.500	
Z	4.876		4.899	
Asymptotic Sig. (2-tailed)	.000**		.000**	
**p < 0.01				

As shown in table 4, fig4, the Emotional Quotient, which is a measure of emotional stability, is significantly higher in the experimental group as compared to the control group.

Fig.4 Histogram of Emotional and Spiritual Quotients of experimental and control groups



Other findings of emotional behaviour are described below. The participating infants and children are intensely keen and excited to follow the Dayalbagh routine. During the three hours spent by the Scheme participants in the agricultural fields, much fewer cries are heard by the coordinators/ parents in the experimental group than would normally be expected to be heard over this period in a similar group of children. They had confidence and alert looks with bright eyes after marching past the Supreme Master. The experimental group participants were also more tolerant to tough situations, like heat, cold or rain in the fields. The children in the experimental group were found to be much more creative than a group of children of the same age who were not participants in the Scheme, in an experiment carried out at the medical camps organized by DEI (Deemed University). This was evident when they were playing with blocks, clay, colors and waste material, out of which they created wonderful items like helicopters and amused the observers.

If hurt or when in fever the experimental group participants tended to repeat the Holy Name RADHASOAMI on their own rather than cry out! Thus showing a greater degree of self-control (pediatrician's observation).

Spiritual consciousness

Reference to table 2 and fig1.(S-6), reveals the Mean of Spiritual Quotient to be significantly higher at 81.37 in the experimental group as compared to that of the control group at 60.75, with Mann Whitney U at 49.50 and the Z value of 4.89, which is significant at 0.001 level. Infants and children from Superman Evolutionary Scheme of Dayalbagh vigorously participate in the spiritual activities of the Dayalbagh way of life such as attending the congregational prayers (Satsang), both early morning and evening, listening to recitation of hymns (*path*) attentively, and going to the fields with their parents or guardians and taking part in selfless service (*seva*). They march past the Supreme Master and offer "Radhasoami" with folded hands. They readily recognize Him in His photographs and often break out into dialogue with Him.

When taken ill the participants in the experimental group repeat the Holy Name and seem to recover faster, possibly through “spiritual healing”. They lovingly address the Spiritual Master as ‘Data Ji’ (Giver of Grace), a respectful salutation, and seem to be awed of only Him and no one else.

The children in SantSu (perman) Evolutionary Scheme of Dayalbagh as mentioned above, appear to be imbibing the qualities of all four “*varnas*” (castes) as described below.

Intuitive Consciousness

The intuitive consciousness was studied by questionnaire method with total 12 questions. The scores, in experimental group, ranged from 6 to 29, out of total score of 48. We feel that this finding is potentially significant. Not surprisingly very few parents in control group could respond to this questionnaire in a meaningful manner and their wards’ scores remained poor or erratic.

The parents of children in the experimental group often notice intuitional responses in them, such as premonition of time of *Satsang* (congregational prayer), creative flashes, and premonitions of the Spiritual Master going to distribute *prasad* (sacrament)-a random activity.

Discussion

Awareness of the importance of spirituality in life and leadership is growing (Fairholm, 1996)⁵. In fact, according to Teilhard de Chardin (in Cashman, 1998 p68)⁶, we are not human beings having a spiritual experience, we are spiritual beings having a human experience. Reflection of true spirituality in life is manifest in the way of life of the residents of the unique colony of Dayalbagh near Agra in India (Brunton, 1934/ 1970)¹.

We feel that this is the first study of its kind in the world where the impact of way of life as distinguished from nutrition, hygiene, environment, and disease has been studied on the growth and development of infants and children as young as 3 weeks to 3 years old.

The embodiment of Radhasoami Satsang Dayalbagh Spiritual way of life is two centuries old and entails discipline, sustained hard work, selfless service to others, conservation of resources, universal economy, unity of purpose, thought and action, so as to achieve enduring success in all endeavors of life. (Juergensmeyer 1991)⁷.

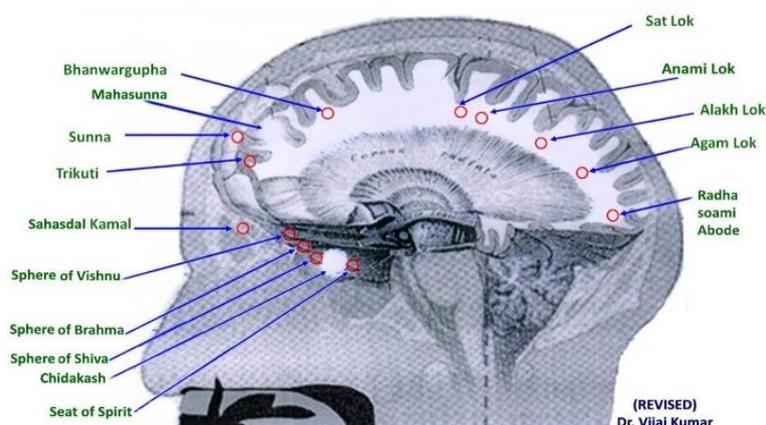
In ancient India the society was divided into four *varnas* or castes according to the nature of their work and duties, namely: *Brahmans*, *Kshatriyas*, *Vaishyas*, and *Shudras*.

Referring to these the Fifth Revered leader of the Radhasoami Faith, His Holiness Sahabji Maharaj, Sir Anand Sarup has stated that: “In my opinion nature is now making efforts to produce men who may be true *Brahmans*, true *Kshatriyas*, true *Vaishyas*, and true *Shudras* and who may be possessing the chivalries of the four *Varnas* or castes. The community of such people would be known as Spiritual Aristocracy... . It would be quite proper to call these people as Superman and in Hindi language they will be known as *Satsangis*”.

The physical human frame has subtle spiritual force centers within physical - material body which act as apertures or nerve centers of ganglia for communion with the corresponding force- co space trees of the macrocosm.

The followers of Radhasoami Faith, including the residents of the colony of Dayalbagh, perform the supratranscendental meditation practice of *Surat Shabd Yog* which ultimately enables them to establish communion with progressively higher creational regions through apertures in the brain at the spiritual plane as depicted in the diagram 2 below:

Brain apertures in the context of meditational practice of 'Surat Shabda Yog'



The SantSu(perman) Evolutionary Scheme of Dayalbagh is unusual in as much as it exposes infants as young as three weeks old to such high meditational environment and highest form of yoga (Mahayog) which is easy to perform as compared to Pranayam, which is difficult and not without risk if not performed properly under a perfect guide. At this age infants and children are impressionable and readily absorb the experiences to which they are exposed. This process is enhanced by the fact that they undertake the spiritual voyage of Dayalbagh way of life every day, day after day, without break.

The impact of Dayalbagh way of life on the participants leads to their accelerated physical growth compared to that of the controls. Specially marked in this respect is the rate and quantum of increase in head circumference. It may be reasonable to assume that this also means accelerated and more marked growth of the brain of the participants within the growing cranium. Perhaps the higher motor, mental and intelligence quotients in the experimental group, in turn, are related to the rapid and more marked brain growth in them. Some of the increase in physical parameters in the experimental group is no doubt related to the nutritional supplement of milk and bengal gram which they receive every day at the fields. But this cannot explain the entire differences between the two groups; other factors must also be at play.

The SantSu(perman) Evolutionary Scheme infants and children, as shown in this study, are more intelligent and creative than their control group counterparts. Of course the development of these traits is multifactorial but the way of life of Dayalbagh with its unique combination of physical, intellectual, spiritual and secular activities seems to have a positive impact on the development of intelligence and creativity in the participants. Besides, it is also observed by the teachers that the experimental group members are socially more active and thus, amongst other things, adapt to school environment readily.

It was seen in the study that the infants and children participating in the Scheme are emotionally more stable and more tolerant to difficult circumstances such as sustaining injuries or being pushed around. It is especially interesting to note that the experimental group members invoke the help of the Lord loud and clear when confronted with difficult circumstances. All in all they seem to remember the Lord more often and repeat the Holy Name more frequently and readily than normal children do (pediatrician's observation). As compared to control group they have fewer episodes of illness in spite of higher degree of exposure at the fields where they attend counselling sessions with specialists on preventive

health and hygiene along with video conferencing when required. They receive integrated treatment, consisting of modern medicine and AYUSH: (acronym of various systems of medicine, namely, Ayurveda, Yoga, Unani, Siddha and Homeopathy).

The SantSu(perman) Scheme infants and children are regularly examined clinically by the pediatrician to ensure whether they are free of disease. To protect them from COVID -19 infection, in addition to normal preventive measures employed universally, we have experimented with UV radiation of appropriate intensity for surface disinfection and hybridized it with volumetric spray of conventional sodium hypochlorite solution. The infants and children are exposed to such sanitized spaces at least two hours after completion of the processes. They continued to attend vigorous routine of SantSu(perman) Scheme including field work and, on regular health screening, were found to have no adverse effects whatsoever and remained asymptomatic. This trial of technology proved to be safe economical and effective to protect against exposure to COVID 19 virus without the need to use expensive technology of fogging and fumigation using drones.

The difference observed in spiritual consciousness of the experimental group compared to the control group is but a manifestation of the impact of the spiritual life of Dayalbagh to which the former are exposed at an early age and their association with the Spiritual Master. The children in the Scheme seem to have already started on the journey which will take them to highest levels of spiritual consciousness as enunciated in the Radhasoami Faith. This is obvious by the sudden glow and smiles that break out on their faces when they go past the Master during the March-Past twice every day.

They are, the “Satsang Superman” of tomorrow, which Revered Prof. Prem Saran Satsangi has defined in the following words: “A complete man with balanced development of body, mind and spirit is called a Superman. He will not come into existence in a day; he will evolve gradually as the human body evolved gradually according to Darwinian principle. As is the case of the body and mind, the spirit will also evolve gradually, and the spirit and mind will become so pure that a Superman will come into existence.”

Conclusion

In this first study of its kind in the world, it is shown that the Dayalbagh way of life and association with spiritual master has a profound impact on the physical parameters and development of intelligence, social and emotional maturity, and intuitive and spiritual faculties of growing infants and children of three weeks to three years of age evolving as “Superman”, according to the Dayalbagh Science of Consciousness (‘DSC’).

References

1. Brunton P. A search in Secret India. *Samuel Weiser Inc. York Beach Maine U.S.A.*1970.
2. Satsangi, P S. and Hameroff S. Consciousness: Integrating Eastern and Western Perspectives. New Age Books New Delhi, India 2016.
3. Richard M B. [Cosmic Consciousness: A Study in the Evolution of the Human Mind](#). Innes & Sons 1905 pp. 1–2.
4. Ken W. The Spectrum of Consciousness, *Quest Books*, Theosophical Publishing House, Wheaton, USA.1977, 20thanniv. ed. 1993.
5. Fairholm G W. Spiritual Leadership. Fulfilling whole-self needs at work. *Leadership & Organization Development Journal* 1996;17(5),11. Retrieved from proquest electronic library via the University of Johannesburg: <http://0proquest.umi.com.raulib.rac.ac.za>.
6. Cashman and Kelvin. Leadership from the inside out: becoming a leader for life. *Provo. Executive Excellence* 1998.
7. Juergensmeyer M. Radhasoami Reality: Logic of a Modern Faith. *Princeton University Press*U.S.A.1991.

Supplementary Materials

Table of contents	Page No.
1. Co Authors- Team of Saran Ashram Hospital Doctors	1
2. Conflict of interest ,Acknowledgments	2
3. Questionnaires:	
(i) Emotional Scale	3
(ii) Spiritual Scale	4
(iii) Intuitive Scale	5
4. Supplementary appendix	
(a) The Radhasoami Faith	6-7
(b) Wikipedia 2019: Spiritual Approaches	8
(c) Ken Wilber : The Spectrum of Consciousness	9
(d) Interaction with Prof. Abhijeet Vinayak Banerjee Nobel Prize winner in economic sciences 2019	10

Co Authors-³ Team of Saran Ashram Hospital Doctors

¹Dr.Gopi Chand Gupta

gopichandgupta@gmail.com

- Medical Officer, Saran Ashram Hospital Dayalbagh Agra282005 India(1999-continuing)
- Director and consultant physician, New York General Medical Clinic,Agra(1996-continuing)
- Consultant pulmonologist, Pareek Hospital and research center, Bagh Farzana ,Agra(1998- continuing)
- Guest and visiting faculty, DEI(deemed Univ) and women's polytechnic, DEI (2004-20051988-1995)
- FDR Department of Veterans affairs Hospital Montrose , NY, USA
Chief of pulmonary Medicine and Director of ICU
(Helped with writing and revising the text, proof reading and collecting references)

²Ajit Kumar Srivastava M.D. (Med)

ajitks@gmail.com

- Senior Physician Saran Ashram Hospital Dayalbagh Agra282005 India (2017-continuing)
- Senior Physician ESI (Employee State Insurance) Hospital Agra (1989-2017)
- Senior resident, All India Institute of Medical Science New Delhi India (1985-1988)
(Helped with study design, writing and revising the text)

³Saran Parshad Srivastava M .S. (Ophth)

pcb2953@gmail.com

- Emeritus Medical Officer In charge Saran Ashram Hospital Dayalbagh Agra 282005 India(01.01.2020 -continuing)
- Medical Officer In charge Saran Ashram Hospital Dayalbagh Agra (2003-2019)
- Honorary Ophthalmologist Saran Ashram Hospital Dayalbagh Agra (1989- continuing)
- Prof .and H.O.D. Ophthalmology Gwalior medical college India (1966-1989)
(Helped with study design, proof reading and collecting the references)

Conflict of interest

We will like to confirm that our Hospital is a totally free institution with no charge for consultations, investigations, or supply of drugs and consumables. As such there is no financial conflict of interest.

Our study was carried out as a part of a natural component of a scheme without any encumbrance on infants and children of parents who continued to lead normal life in the circumstances of the plan and program of the scheme. Further being a multispecialty hospital there is generally no professional conflict of interest as all services of doctors are totally free of any kind whatsoever are charged from the patient. Each specialist deals with His or her area of specialty. Being from middle socioeconomic group there is no competitive demand on the participant's resources.

Acknowledgements

We sincerely acknowledge the help and support of Mr. Hazursaran Srivastava, Dr.Mrs.Ira Das, Dr. Mrs Surila Agarwala and Dr. Mrs. Radhika Sing of DEI for their unstinted support and help in the study and preparation of this manuscript .We also thank Mrs. Shashi Mishra coordinator Sant Su(perman) scheme and Mrs Bindu Dhingra clinical psychologist of Fortis Escorts Hospital Faridabad for many favors.

(i)

**SUPERMAN EVOLUTIONARY SCHEME
EMOTIONAL SCALE-I**

For children three weeks to three years of age Parents'/Supervisors' observations

	ITEM	ALWAYS	SOME-TIMES	NEVER	CANNOT SAY
1	Child uses nonverbal emotional communication				
2	Development of trust and secure attachment(Relation Skill)				
3	Socialization-a) Smile				
	b) Response to Happenings				
4	Self-soothing(Emotional Regulation) Child is able to regulate his or her emotions e.g.(ability to deal, face use and transcend pain and suffering)				
5	Decoding others' facial expressions(Child reacts to other children's emotional status e.g. crying, laughing)				
6	Response to disturbing emotions – trying to get away (stranger fear)				
7	Empathy (Pro-Social Behavior) Child is aware of others' emotional status or feelings (anger /pain/trouble) e.g. father/mother or any other person and reacts appropriately				

EMOTIONAL SCALE –II

For children more than three years of age Parents'/Supervisors' observations

	ITEM	ALWAYS	SOME-TIMES	NEVER	CANNOT SAY
1	Impulse control				
2	Self-talk (internal dialogue)				
3	Problem solving skills				
4	Decision making skills				
5	Conflict resolution skills (amongst other children)				

(ii)

**SUPERMAN EVOLUTIONARY SCHEME
SPIRITUAL DEVELOPMENT SCALE
For children three weeks to three years of age Parents'/Supervisors' observations**

	ITEM	OBSERVATION	ALWAYS	SOME-TIMES	NEVER	CANNOT SAY
1	Quality of sleep	Good Sound sleep				
2	Morning waking time	Early, By self				
3	Response to Satsang environment	Sits quietly, Never disturbs others				
4	Response to path/kajari	Claps, Dances, Enjoys				
5	Response to khet activities	Likes to work, Drink milk as Prasad, Folds hands during March- Past				
6	Response with other children	Cooperates and Enjoys group activity				
7	Response to Revered Guru Maharajs' Swaroop (enlarged photo)	Fold hands and says Radhasoami, Enjoy Darshan, Tries to talk to Swaroop				

CHILDREN'S INTUITIVE CONSCIOUSNESS SCALE
For children three years of age-Parent's / supervisor's observations

	Item	Always	Often	Some times	Rarely	Never
1.	Child is unduly happy before the occurrence of some sudden happy event					
2.	Child is sad /serious/crying without any apparent reason, before the occurrence of some unhappy /unfortunate event					
3.	The child says something which happens to be true in future					
4.	The child understands the moods, thoughts and emotions of others without any clue from their behavior, facial expressions, acts or any other indication.					
5.	The child suddenly wakes up from deep sleep with a sensation that somebody from higher region has been communicating with him/her					
6.	The child feels worried/excited before something bad/good happens without prior knowledge of that incident.					
7.	The child gets creative flashes which lead to wonderful creations.					
8.	When faced with limited or incomplete information ,the appropriate solution/decision occurs to the child all of a sudden					
9.	The child can foresee a disaster (illness, death, accident etc.) even if it is not connected to him/her					
10.	The child takes decision based on his/her gut feeling rather than logic or facts					
11.	If the child cries in the evening (evening colic) how is he/she satisfied by you (e.g. going out, going to satsang, listening to music /path, feeding playing etc?)					
12.	Any other observation similar to the above.					

THE RADHASOAMI FAITH

(a)

According to the teachings of the Faith there are three elements in the human body: first, the coarse matter of which the physical body is made; second, the subtle matter of which the human mind is made; and third, the subtlest spirit (Atman or Surat), which is the life and soul of the human body and which brings about the evolution and development of man's body and mind. The human body and mind both are perishable, i.e. mortal, while the spirit is immortal. Just as man's body has been created and endowed with life by the spirit (Atman or Surat), in like manner the entire creation has been brought into existence and endowed with life by the Param Atman or the Supreme Being or Merciful Radhasoami. Since the essence of the Atman and the Param Atman (Paramatma) or of the spirit (Surat) and the Supreme Being is one and the same, the human body has been accepted as the miniature of the whole creation. The creation is thus described as the Macrocosm and the human body, the Microcosm. According to the Radhasoami Faith, the Supreme Being has blessed the human body with certain latent faculties through the help of which the spirit-entity may be able to establish contact with different regions of the Universe and thus get an opportunity of deriving maximum benefit from the human body. He has also been pleased to arrange for the advent on this earth, from time to time, of holy and awakened souls. These souls are fully conversant with the secrets pertaining to these faculties, the practical methods of awakening them and also with the way they should be used. Besides, they are competent to explain these secrets to others for awakening these faculties and thus enable mankind to profit by them. The Radhasoami Faith specially emphasizes the man should make it the aim of his life to develop his faculties of all the three kinds, physical, mental and spiritual, throw off all lethargy and ignorance and make effort to achieve object in view by adopting appropriate methods. It cannot be disputed that every newborn child has to take the help of his parents for some time for developing his physical and mental faculties and after that he has to receive his lessons from teachers, of physical training and of various arts and sciences. On the same principle, the Radhasoami Faith lays down that, in the matter of the development of spiritual faculty also, one should become the disciple of some competent spiritual teacher who, in the terminology of the Religion of Saints, is known as the SantSatguru. The expression 'SantSatguru' does not refer to any person who possesses mere theoretical knowledge of the secret of spiritual powers and the various stages of the spiritual journey; it refers to a Master Who either has, by means of practices (devotional and spiritual), fully developed His spiritual faculty and realized the True Supreme Being or is possessed of this high status from His birth. The devotee who aspires to attain spiritual knowledge has to renounce worldly freedom, restrain unnecessary activities of his body and mind and concentrate and fix his attention on the spiritual objective.

However, as food, worldly possessions and environments exert a great influence on a man's body and mind, the Radhasoami Faith requires that an ardent devotee should restrict himself to such satoguni (i.e. pure and clean) food as may not excite his body and mind to unnecessary and undesirable activities, that he should interest himself in worldly possessions and things to the extent that may be absolutely necessary and that he should spend his time only in such engagements and such associations as may be conducive to and helpful in the attainment of his prime object.

Admission to the faith

When the conditions stated above have been accepted by an applicant for initiation, he is taught two devotional practices which enable him to gain sufficient control over the desires pertaining to his body and senses and to turn his attention inwards towards the spiritual plane. When reasonable progress in these practices has been achieved and he has acquired the capacity to proceed internally towards the different stages of the spiritual path, he is initiated into the third devotional practice, viz. the practical method of advancing towards the spiritual plane, which, in the terminology of Saints, is called Sound Practice or 'ShabdaAbhyas'. Sufi Saints call it Sultan-ul-Azkar. It is these three devotional practices which constitute the close secret of the Radhasoami Faith. The person who is initiated into these spiritual practices under the authority of the SantSatguru is known as a Satsangi. The methods of the devotion are explained to the seeker, without distinction of caste, creed or color, on his giving a word of honor that he would abstain from the use of animal food including eggs, abstain from the use of alcoholic drinks and intoxicants of kinds including opium, bhang, charas etc., that he accepts 'Radhasoami' as the True Name of the Supreme Creator and that he would refrain from initiating any person in the devotional practices of the Radhasoami Faith without express written authority from the Radhasoami Satsang Sabha in this connection.

WIKIPEDIA 2019

SPIRITUAL APPROACHES

Further information: Level of consciousness (esotericism) and higher consciousness

To most philosophers, the word "consciousness" connotes the relationship between the mind and the world. To writers on spiritual or religious topics, it frequently connotes the relationship between the mind and God, or the relationship between the mind and deeper truths that are thought to be more fundamental than the physical world. The mystical psychiatrist Richard Maurice Bucke¹ distinguished between three types of consciousness: 'Simple Consciousness', awareness of the body, possessed by many animals; 'Self Consciousness', awareness of being aware, possessed only by humans; and 'Cosmic Consciousness', awareness of the life and order of the universe, possessed only by humans who are enlightened.[175] Many more examples could be given, such as the various levels of spiritual consciousness presented by Prem Saran Satsangi and Stuart Hameroff². [176] The most thorough account of the spiritual approach may be Ken Wilber's book *The Spectrum of Consciousness*, a comparison of western and eastern ways of thinking about the mind. Wilber described consciousness as a spectrum with ordinary awareness at one end, and more profound types of awareness at higher levels. [177]

1. Richard M B. [Cosmic Consciousness: A Study in the Evolution of the Human Mind](#). *Innes & Sons 1905 pp. 1–2.*
2. Satsangi, P S. and Hameroff S. *Consciousness: Integrating Eastern and Western Perspectives*. New Age Books New Delhi, India 2016.

Ken Wilber: The Spectrum of Consciousness (20th Anniversary Edition 1993).Quest Books, Theosophical Publishing House , Wheaton, USA . 1997

Foreword by John White

In 1973, when I was working at the Institute of Noetic Sciences (IONS) in California as Director of Communications, a letter arrived inquiring about financial support for a project in noetic research. The writer was Ken Wilber.

At the time Wilber was twenty-four and a graduate student in biochemistry at the Lincoln campus of the University of Nebraska. He was about to complete doctoral requirements, except for the dissertation, and hoped to find the means to take a year off from his scientific work so he could pursue in greater depth another line of research he had been engaged in for several years, both in theory and practice: the psychology of higher states of consciousness. (He had become a student of Zen Buddhism in 1972 and later was to study under several Zen and Tibetan Buddhist masters.)

Wilber's proposal for a theoretical study of Eastern and Western psychologies seemed to have much merit. But the economic tenor of the time was such that many worthy projects couldn't be funded by IONS. In fact, to be frank about it, IONS, which had been founded only a year earlier by astronaut Edgar Mitchell to study human consciousness, was in danger of going under because promised financial support hadn't come through. I regretfully informed Wilber that we couldn't provide the grant he sought. However, I encouraged him to go ahead as best he could with the research because it sounded worthwhile.

About a year later, after I had left IONS and returned to Connecticut, a letter was forwarded to me. It was from Wilber. He had indeed been busy with his project. Despite lack of institutional funding, he had found the means—principally by working as a dishwasher at a local restaurant—to write a fairly long book, *The Spectrum of Consciousness*. Would I, he asked, help him find a publisher?

I was happy to help an aspiring young writer-researcher in noetics, especially after his manuscript arrived and I looked it over. As Dr. James Fadiman, former president of the Association of Transpersonal Psychology, was to describe it later, Wilber had written "the most sensible, comprehensive book about consciousness since William James." I, too, felt that way. Recognizing a moral duty to support the book, I took it under my wing, so to speak, and was able after many submissions – thirty-three, as I recall – to find a publisher for it. Rosemarie Stewart, senior editor of The Theosophical Publishing House, regarded *Spectrum* as publishable. Clarence Pedersen, the publications manager, seconded her. Together they presented it to the Publications Board members, who agreed and accepted the book. It was published in 1977. Toward the end of the production process, after a long haul getting the book into print, Wilber dedicated it to me. I was surprised and deeply touched.

In the years since our first contact, I've watched Wilber produce a prodigious amount of extraordinary work, both as an author and as a former editor-in-chief of *ReVision* journal, which has drawn widespread and highly favorable attention in religious, academic and intellectual circles. Currently, that work consists of twelve books and a variety of shorter pieces – essays, reviews and commentaries. Altogether,

1. Ken W. The Spectrum of Consciousness, *Quest Books*, Theosophical Publishing House, Wheaton, USA.- 1977, 20thanniv. ed. 1993.

(d)

Interaction with Prof. Abhijit Vinayak Banerjee, Ford Foundation International Professor of Economics, Massachusetts Institute of Technology; Awarded The Sveriges Riksbank Prize in Economic Sciences in Memory of Alfred Nobel 2019 for experimental approach to alleviating global poverty.



- **Prof. Pami Dua:** I am Pami Dua from the Delhi School of Economics. I congratulate you on your stellar achievement as well as the experimental approach that you have advocated and employed successfully. Now, I am associated with the D.E.I. (Deemed University) in Dayalbagh in various ways and what I want to say is that it is a living socio-economic model of community and education engagement and I feel that this model comes very much close to your work and is very aligned with your philosophy and it is just a thought that perhaps we can talk about this and have a dialogue between the approach that is used in education and also the approach that comes very close to your heart in alleviation of poverty and upliftment of marginalized sections of the society.
- **Prof. Abhijit Banerjee:** As you know, I am very willing to come and learn. I just haven't had a chance right now. Thank you!
- During the post-event meeting, Prof. Abhijit Banerjee specially signed a copy of his new book for The Most Revered Emeritus Chairman, Advisory Committee on Education, Dayalbagh Educational Institutions. He also signed an individual copy for each of the members of the delegation, and had a few pictures with the group. Prof. Abhijit Banerjee also accepted a congratulatory note and letter of invitation signed by the President, Radhasoami Satsang Sabha and President, Dayalbagh Educational Institute on behalf of the entire community. Some additional material on Dayalbagh and the research and other activities at Dayalbagh Educational Institute will be delivered to him upon his return to Boston, USA.
- **Interaction with Prof. Abhijit Banerjee took place as scheduled on November 23, 2019 on DEI's vast Computing Cloud and Video Conferencing Network spread over 443 ± 1 nodes.**