

Super Brain Yoga as An Innovative Intervention for Improving Attention, Memory, And Learning Outcomes in Special Education

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Abstract—These special educational needs are manifested in children's attention, memory, concentration and learning difficulties, which require innovative and comprehensive approaches to children's education. Super Brain Yoga is an exercise that has grown in popularity not only for brain strengthening, but also for brain learning. It includes breathing, cross lateral exercise, acupressure exercise and a simple exercise focusing on the mind and body. This paper is a secondary research paper and existing literature on effectiveness of Super Brain Yoga on attention and memory in the learning of special children has been critically reviewed. The study draws on the literature from peer reviewed journal articles, books, conference proceedings and credible academic sources to look at the theoretical underpinning, reported cognitive benefits, educational applications, and practical implications of this intervention. Moreover, the study investigates the feasibility of Super Brain Yoga applications in inclusive education with children having different learning difficulties. The study exposes the strengths and weaknesses of the existing literature, the trends and knowledge on the role of Super Brain Yoga in special education, and provides a comprehensive overview of the field. The findings will provide relevant information for teachers, therapists, policymakers and researchers interested in finding cost effective, non-invasive and evidence-based interventions that support cognitive development and help to enhance educational outcomes for students with special educational needs.

Index Terms—*Super Brain Yoga, Learning Outcomes, Special Education System, Memory Skills, Selective Attention, Alpha-Wave Activity*

I. INTRODUCTION

Super Brain Yoga (SBY) is a cost-effective and non-invasive physical intervention that employs squatting

and ear acupuncture protocols in order to redirect energy to the human brain (Vinu et al. 2024). This programme is also recognised as an adjunctive tool for special education to improve selective attention, concentration, short-term memory, and overall cognitive potential. Through the improvement of short-term memory and selective attention, the special children can retain their visual and verbal information more significantly, upgrading their academic performance (Sudhan & Parveen, 2024). SBY stimulates a surge in alpha wave activity in the brain. This brainwave state is integrated into calm alertness, minimised psychological stress, and focused attention (Yang et al. 2025). Through this yoga-based intervention, the squatting posture, combined with earlobe pressure, enables synchronisation between the right and left hemispheres of the brain.

Problem Statement:

The children with special educational requirements are struggling with the executive functioning gap, cognitive development barriers, and memory skill errors. The conventional methods outline the “environment reshaping process” around the child rather than strengthening their cognitive capabilities and neural processes. In order to address this gap, the study examines whether the Super Brain Yoga-based self-contained intervention maximises classroom engagement, cognitive growth rate, and learning deliverables under the special education system.

Scope:

The scope of the current research study is to identify the significance of the super brain yoga programme in resolving the attention deficit and hyperactivity

disorder of the special child. Another scope is to determine the positive effect of the SBY intervention process in improving the memorisation power, analytical mindset, and problem-solving skills of the special children to make them successful at the academic level.

II. OBJECTIVES

1. To demonstrate the significance of Super Brain Yoga as a brain-strengthening and brain-learning programme within the special education system
2. To evaluate the mechanism of Super Brain Yoga in improving cognitive potential, memory, and concentration levels among special children
3. To assess the impact of the Super Brain Yoga programme on the positive learning outcomes for the special children
4. To analyse the influence of Super Brain Yoga in the inclusive education system with varied learning requirements under special education

Study Limitations:

The study did not properly outline the influence of SBY from simultaneous interventions. It indicated that the modified learning outcomes in special education could be triggered by an individualistic therapy outside the school environment, natural growth and maturity over the study course, the effect of medication, or the teacher's upgraded pedagogical strategy.

III. LITERATURE REVIEW

Super Brain Yoga acts as a physical behavioural reset for individuals struggling with executive dysfunction and sensory overload. The researchers and educators consider the SBY as an adjunctive therapy for students having learning complexities; including autism or attention deficit disorder (Hart et al. 2022). Regular engagement in the SBY programme helps improve the concentration level, selective attention, memorisation skills, and overall cognitive potential of the students with learning difficulties (Thakur & Pandey, 2025). As the SBY process enables hemispheric synchronisation of the human brain, the special children can upgrade their creative mindset and logical problem-solving attitude, which will be positively significant in their academic aspect (Vinu et al. 2024).

This program calms the nervous system by making it relaxed, resulting in the minimisation of frequent sensory meltdowns, aggression, anxiety, and stress. Holding the earlobe and squatting with breath and repeating the cycle 14 to 21 times regularly stimulates emotional stabilisation (Jalilishi & Sadeghian, 2023). This scenario enables the deep psychological balance and allows the special children to become more cooperative and team players throughout the group assignments and social tasks. SBY facilitates critical thinking, innovation level, and better problem-solving skills (Sanjaykumar et al. 2024). Henceforth, SBY refines the prefrontal cortex to expand the workbench of a special child's working memory when solving complex maths problems.

Research Gap:

The research gap of this study is the consideration of secondary qualitative data rather than the adoption of primary quantitative information. That is why there is a lack of contextual understanding of the impact of the Super Brain Yoga intervention in improving cognitive capacity within special education. Through this secondary data collection method, the topic-relevant information was assembled by integrating varied research questions; there may be a chance of misalignment between the current objectives and targeted themes.

IV. METHODOLOGY

Research Design:

The study utilised the “qualitative” research method to grant instant access to the topic-relevant information (Furidha, 2023). This design highlighted the “open data movement” protocol through the extraction of detail-oriented data from credible datasets. This design enabled the utility of the existing information by questioning the “how” and “why” questions regarding the rationale behind the unusual behaviour among the special children and the mechanism of Super Brain Yoga in overcoming it.

Data Collection Method:

The study followed the “secondary data collection method” because of its time-saving and cost-saving approach and instant accessibility to a wider database on the relevant topic (Ganesha & Aithal, 2022). The Google Scholar-based peer-reviewed articles, journals, academic databases, health journals, and

newspaper articles not older than 5 years were employed to collect authentic information for reviewing the predefined objectives.

Data Analysis Technique:

The study adhered to “*thematic analysis*” in assembling nuanced perceptions and demonstrating the inner meanings of the collected information in a sequential approach (Braun & Clarke, 2024). This technique condenses a huge range of relevant qualitative information into a structured format to understand the significance of SBY in the special education system.

Research Ethics:

The proper credit to the original author through the APA citation was done to enable the credibility of the extracted information. All the data was alphanumerically protected in the cloud databases to avoid data loss, information leak, and data manipulation.

V. INTERPRETATION & ANALYSIS

Theme 1: Super Brain Yoga is a brain-learning and brain-strengthening program in special education

Super Brain Yoga is a modernised portrayal of an ancient Indian acupressure and yogic strategy. This programme is applied as a cognitive therapy within the special education system to activate the neural pathways and balance the left & right hemispheres of the human brain (Ziaei, Sohrabi & Taheri, 2026). The special education tutors utilise the SBY approach as a regular classroom activity. This is highly significant to make the special students calm and modify their hyperactive behavioural traits.



Figure 1: Squat position of Super Brain Yoga

(Source: Vinu et al. 2024)

Under the SBY process, crossing arms and touching the opposite ears or the cross-lateral movement provokes both hemispheres of the brain to communicate, supporting the special children suffering from dyslexia to improve their communication level (Kanchibhotla et al. 2022). This program supports the neurodevelopment of special children, such as those with learning disabilities, autism disorder, and attention deficit issues, by modifying their emotions and cognitive functionalities (Sudhan & Parveen, 2024). SBY is also recognised as a sensory processor of the human brain, while the combined version of the deep breathing and physical movement helps the special children to upgrade their attention span and level of concentration, resulting in the improvement of their academic performance.

Theme 2: Super Brain Yoga improves attention, memory, and cognitive capabilities

Super Brain Yoga pays attention to modifying the executive functioning and overall cognitive prospects of the children under the special education system through the consideration of the cross-lateral movement and acupressure method. This kind of neural coordination resumes the electrical activity of the human brain. Generally, the alpha wave pattern is evolved, which is directly integrated into the appearance of a relaxed alertness state (Bhuvaneswari, Sujatha & Vasanthi, 2024). This transition for individuals with learning complexities accelerates the speed of cognitive processing, prolongs the attention span during tasks, and sharpens the memory retention level.



Figure 2: Standing position of Super Brain Yoga

(Source: Vinu et al. 2024)

The SBY programme develops a significant internal atmosphere for focused cognitive labour through the minimisation of physiological anxiety and promotion of hemispheric balance (Manjunath, Channappa & Karthikeyan, 2024). This yoga process is a practice-driven mechanism to reduce mental fatigue, prime the brain for academic performance, as well as memory consolidation, and support the emotional reactivity for the special children.

Theme 3: Impact of Super Brain Yoga on Educational Performance for Special Children

The academic performance of the special children under the special education system is influenced by the preparedness of their cognitive growth through the implementation of the Super Brain Yoga-based non-invasive procedure. The regular involvement in this yoga process maximises the activity of the alpha wave and hemisphere synchronisation (Vinu et al. 2025). For the learner with neurodevelopmental issues, SBY is a transformative intervention to modify the cognitive prerequisites for working memory, selective attention, and concentration. In clinical terms, this yoga programme, through the synchronised squatting and cross-arm positioning, minimises the hyperactivity symptoms and classroom off-task behavioural gestures.

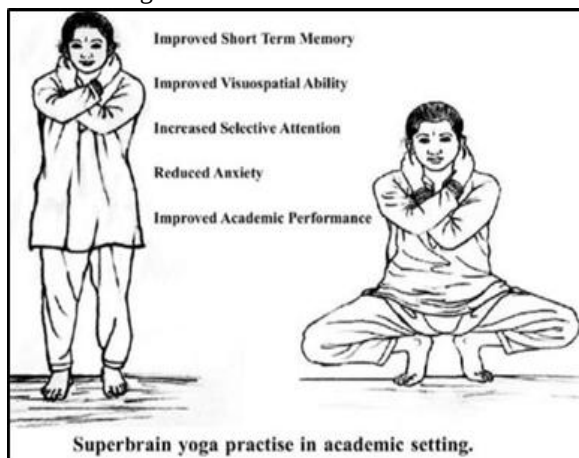


Figure 3: Benefits of Super Brain Yoga

(Source: Vinu et al. 2024)

This exercise allows the special educators to enable the special children's relaxed mode, improve their visuo-spatial ability & short-term memory, and free them from high anxiety (Vinu et al. 2024). Therefore, the prefrontal cortex will have a positive correlation

with sharpening the students' critical thinking power, judgmental skills, mathematical problem-solving skills, and reading comprehension (Janagap & Janagap, 2022). Continuous practice of this exercise is directly relevant to the positive academic performance of the special children.

Theme 4: Benefits of Super Brain Yoga in inclusive education under the various learning needs of children

The concepts of Super Brain Yoga demonstrate a holistic and promising intervention to enhance the cognitive progression and positive brain function for individuals struggling with learning difficulties, autism spectrum disorder, and attention-Deficit/Hyperactivity Disorder (ADHD). This scientifically backed and powerful tool reinforces inclusive education facilities by enabling support for different learning needs (Tripathy, 2023). Within the inclusive classroom architecture, the benefits of this yoga outline the diverse learning and neuro-divergent profiles. For the special children struggling with autism disorder, the repetitive usage of super brain yoga mechanisms offers a minimised anxiety rate and positive sensory integration to enable the special children's self-soothing throughout the transition phase (Sudhan & Parveen, 2024). The children with learning disabilities and dyslexia utilise this yoga programme to enhance cognitive functionality and neuroplasticity concepts to improve their spatial orientation, memory retention, and text processing (Kumar & Rathi, 2025). The children with hyperactivity and ADHD symptoms are utilising the super brain yoga programme to stimulate the alpha-wave activity and make the physical energy into a sharp, focused attitude to improve their engagement in the classroom activities.

VI. KEY FINDINGS

The findings are,

- Super Brain Yoga allows the special students to improve their alpha brain activity, which is directly aligned with the enhancement of short-term memory and concentration level.
- The acupressure principle of this yoga mechanism upgrades the cognitive gains, which helps the students' academic success.
- After placing the hands across the chest, along with crossing the midline of the body, allow the students

with learning difficulties to trigger their left & right hemispheres of the brain and enable the emotional and behavioural regulation.

- This squatting exercise acts as an inclusive bodily-kinaesthetic tool, which supports diverse learning needs for the special children with autism spectrum issues, learning complexities, and ADHD symptoms under the special education system.

VII. RECOMMENDATIONS

The methodological recommendation of this study is to implement the “primary survey quantitative method” to get better clarity through the consideration of the empirical data and statistical information on the exact outcome of super brain yoga in the special education system. In this aspect, another recommendation is to select the special children to check whether the SBY mechanism has full significance in improving the special children’s memorisation power, attention rate, and learning outcomes, rather than discarding the participants involved in the medication process, individualistic therapy outside the school environment, or teacher-advanced instruction mechanism.

VIII. CONCLUSION

Super Brain Yoga is a non-invasive, zero-cost, and highly feasible neuro-educational tool within the special education system. It significantly emphasises the interconnectivity between the modern cognitive growth approaches and ancient somatic movement for special children to upgrade their memory skills, attention levels, and learning success at the academic level. According to the secondary qualitative data collection method and thematic analysis, it has been discovered that SBY stabilises the neural system and optimises the brain wave activity. This yoga programme empowers the neuro-divergent students within the inclusive classroom session to minimise their anxiety rate, control their self-emotion & reactive attitude, and make the special children focus-oriented to become successful at the academic level.

REFERENCES

- [1] G. Bhuvaneswari, E. Sujatha, and G. Vasanthi, “Effect of Superbrain Yoga Exercise on

Education Performance,” *Journal of Pharmacy and Bioallied Sciences*, vol. 16, Suppl. 3, p. S3021, 2024, doi: 10.4103/jpbs.jpbs_607_24.

- [2] V. Braun and V. Clarke, “Supporting best practice in reflexive thematic analysis reporting in Palliative Medicine: A review of published research and introduction to the Reflexive Thematic Analysis Reporting Guidelines (RTARG),” *Palliative Medicine*, vol. 38, no. 6, pp. 608–616, 2024, doi: 10.1177/02692163241234800.
- [3] B. W. Furidha, “Comprehension of the descriptive qualitative research method: A critical assessment of the literature,” *Acitya Wisesa: Journal of Multidisciplinary Research*, pp. 1–8, 2023, doi: 10.56943/jmr. v2i4.443.
- [4] H. R. Ganesha and P. S. Aithal, “How to choose an appropriate research data collection method and method choice among various research data collection methods and method choices during Ph.D. program in India,” *International Journal of Management, Technology, and Social Sciences*, vol. 7, no. 2, pp. 455–489, 2022, doi: 10.47992/IJMTS.2581.6012.0233.
- [5] N. Hart, S. Fawkner, A. Niven, and J. N. Booth, “Scoping review of yoga in schools: Mental health and cognitive outcomes in both neurotypical and neurodiverse youth populations,” *Children*, vol. 9, no. 6, Art. no. 849, 2022, doi: 10.3390/children9060849.
- [6] A. Jalilishi Shavan and N. Sadeghian, “The Effect of Yoga Therapy as a Supplement in the Management of Students with Dyscalculia: A Clinical Trial Study,” *Physical Treatments – Specific Physical Therapy Journal*, vol. 13, no. 2, pp. 105–112, 2023, doi: 10.32598/ptj.13.2.546.2.
- [7] A. Janagap and T. M. F. Janagap, “Superbrain yoga: Impact on the reading comprehension and behaviour of slow readers,” *Psychology and Education: A Multidisciplinary Journal*, vol. 4, no. 3, pp. 322–329, 2022, doi: 10.5281/zenodo.7066929.
- [8] D. Kanchibhotla, P. Gupte, P. Harsora, and S. Kulkarni, “Impact of Prajñā yoga on cognition in adolescents with congenital and adventitious visual impairment,” *EXPLORE*, vol. 18, no. 3, pp. 313–318, 2022, doi: 10.1016/j.explore.2021.05.010.
- [9] S. Kumar and A. Rathi, “School-based yoga

- intervention for internet resilience and holistic well-being of adolescents,” *Brain, Behavior, and Immunity – Integrative*, vol. 9, Art. no. 100102, 2025, doi: 10.1016/j.bbii.2024.100102.
- [10] I. Manjunath, V. Channappa, and A. Karthikeyan, “A systematic review of yoga as a supportive treatment for children with Attention-Deficit/Hyperactivity Disorder,” *Cureus*, vol. 16, no. 7, 2024, doi: 10.7759/cureus.63576.
- [11] S. Sanjaykumar, S. Natarajan, P. Y. Lakshmi, Z. Kozina, and R. Pavlović, “Effectiveness of super brain yoga practice timing on stress, anxiety, and aggression levels among college students: A randomised controlled trial,” *Academic Journal of Health Sciences*, vol. 39, no. 4, pp. 92–97, 2024, doi: 10.3306/AJHS.2024.39.04.92.
- [12] P. Sudhan and S. J. Parveen, “Effect of Brain Yoga practice in the university academic students: Optimising quality of life and stress management,” *Educational Administration: Theory and Practice*, vol. 30, no. 3, pp. 458–466, 2024, doi: 10.53555/kuey. v30i3.1290.
- [13] L. Thakur and N. Pandey, “The Effect of Super Brain Yoga Intervention on Emotional Regulation and Perceived Stress among High School Students,” *International Journal for Multidisciplinary Research (IJFMR)*, vol. 7, no. 3, 2025.
- [14] K. Tripathy, “Effectiveness Super Brain Yoga on Short-Term Memory & Selective Attention among the School Students,” *Indian Journal of Applied Research*, vol. 13, no. 1, 2023, doi: 10.36106/ijar.
- [15] V. Vinu, S. N. Jois, R. Moulya, M. Meena, K. Nagendra Prasad, and L. Dsouza, “Longitudinal evaluation of superbrain yoga practice on academic performance among adolescents,” *Health Education and Health Promotion*, vol. 10, no. 2, pp. 271–276, 2025.
- [16] V. Vinu, J. N. Srikanth, K. N. Prasad, and L. Dsouza, “Viability of Superbrain Yoga Practice in Academic Setting: A Systematic Review,” *Current Traditional Medicine*, vol. 10, no. 7, pp. 35–45, 2024, doi: 10.2174/2215083810666230830125242.
- [17] Q. Yang, Y. Wang, S. Yuan, J. Tian, and P. Zhang, “The impact of a 12-week yoga intervention on attentional performance in school-aged children: A randomised controlled trial in Western China,” *BMC Public Health*, vol. 25, no. 1, Art. no. 3703, 2025, doi: 10.1186/s12889-025-25060-6.
- [18] S. H. Ziaei, M. Sohrabi, and H. Taheri, “Comparison of the Effects of Transcranial Direct Current Stimulation (tDCS) and Super Brain Yoga on Balance and Balance Confidence in Inactive Elderly Individuals,” *Zahedan Journal of Research in Medical Sciences*, vol. 28, Art. no. e166115, 2026, doi: 10.5812/zjrms-162492.