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**Topic: Effect of Meditation and Pranayama on Concentration, Attention span and Academic Achievement of Children with Learning Disabilities**

**Department: Department of Teacher Training & Non-formal Education**

**Keywords: Meditation and Pranayama, Concentration, Attention span, Academic Achievement and Learning Disabilities**

## **Findings**

- 1.** The major finding of the analysis of pre-concentration score indicates that among children with learning disabilities, a substantial majority (66.66%) exhibit average concentration levels, while a notable minority (20%) demonstrate high concentration, and a smaller subset (13.33%) struggles with maintaining concentration during the test, potentially impacting their overall learning experiences.
- 2.** The major finding of the pre-attention span score analysis reveals that, a substantial majority of children with learning disabilities exhibited either average (66.66%) or short (16.66%) attention spans, highlighting the potential challenges some may face in maintaining focus during tasks, while a smaller percentage (16.66%) demonstrated a high level of attention span.
- 3.** The major finding of the pre-attention span score analysis reveals indicates that 23.33% of students with learning disabilities have achieved high academic performance, 16.66% exhibit average achievement, suggesting a moderate understanding, while a significant majority (60%) demonstrates poor academic performance, emphasizing the need for targeted interventions.
- 4.** The major finding of the study suggests that the incorporation of meditation and pranayama as interventions for children with learning disabilities significantly improves concentration levels, as evidenced by a substantial and statistically significant difference in mean values before and after the intervention, with a considerable effect size and low risk of Type I error.
- 5.** The study revealed a statistically significant and substantial improvement in the attention span of children with learning disabilities following an intervention involving meditation and pranayama practices, demonstrating the efficacy of these techniques in enhancing attention span among this population.
- 6.** The study indicates a statistically significant improvement in academic achievement among children with learning disabilities following meditation and pranayama intervention, supported by a substantial effect size ( $d = 0.86$ ), suggesting the effectiveness of these techniques in enhancing academic performance.
- 7.** Opinion of student's after completing the ten-week yoga session; the researcher conducted a semi-structured interview and asked questions to students. After analyzing the responses, the key findings are:
  - Some students were interested in mathematics and language, potentially due to intrinsic motivation or the challenge of self-directed study. Yoga, meditation, and pranayama improved focus and mental clarity, making topics more engaging and

possible. Abstract and sophisticated mathematical and linguistic concepts can be difficult to grasp without a solid basis. More effective teaching methods and materials might be needed to improve comprehension. The ten-week yoga practice could suggest a desire for stress alleviation and overall well-being.

- Meditation and pranayama exercises promoted concentration and attention, allowing students to focus more effectively on their academics. The intervention provided effective learning tools and problem-solving methodologies, which improved attitudes towards maths.
- Students felt better cognitive processes, which resulted in more effective and efficient learning. Meditation improved memory recall and organizational skills by lowering stress.
- Students admired the holistic approach of yoga, meditation, and pranayama, which addressed both procedural fluency and conceptual understanding. Students found these methods captivating and engaging, which contributed to a positive and motivated learning environment.
- Persistent meditation and pranayama practice improved cognitive capacities, focus, self-awareness, and stress management. Continuous practice created a neuroplastic environment that improved problem-solving ability, particularly in mathematical tasks.
- Sustained practice for 10 weeks resulted in a substantial mental and physical transformation. Improved Problem-Solving: Students' problem-solving abilities, particularly in managing mathematical obstacles, improved.