

ABSTRACT

Title of the study-

Comparing the Effect of Yoga and Physical Exercise on Executive Function in Primary School Children: A Randomized Controlled Trial

Background-

The term of Executive function refers to a set of cognitive processes, which is involved in planning, monitoring, and revising goal-directed behavior. It plays an important role in multiple areas of child development; those are social cognition, communicative behavior, and moral behavior. Executive Functions are very important for physical and mental health in childhood. Practicing yoga and physical exercise has been showed the improvement executive function in children.

Aim-

To compare the effect of yoga and physical exercise on executive functions in primary school children

Methods-

Forty two children's were randomly divided into yoga (n=22) and control (n=21) group. Yoga group underwent training for 4 week, everyday, 1 hour per day whereas the Physical exercise group followed the physical exercises for the same duration. Working memory, Attention and Planning were assessed for all participants before and after. The Planning was measured by using Children's assessment of Trail making Test (TMT), Working memory was assessed using by Digit Span Test (DST), And Attention was assessed using by Symbol Substitution Test (SST).

Result-

The baseline was matched for the all variables TMT A, TMT B, DST, and SST. In between group no change was observed for all the variables. Within group comparison showed a significant improvement for the both groups in all the variables. In within group comparison, the yoga group showed higher percentage of improvement in DST (39.94%) and SST (17.18%) and the physical exercise group showed higher percentage of improvement in TMT-A (32.68%), TMT-B (43.60%), DST (37.67%).

Conclusion-

The study suggests that both yoga and physical exercise may be considered an effective option to improving executive functions.

Keywords-

Executive functions, Yoga, Physical exercise, Children.