

# **Effect of chiropractic care on short term auditory memory in children with school learning dysfunction.**

*Katie Hallworth BSc (Chiro) and Christina Cunliffe DC PhD FCC*

## **ABSTRACT**

### **Background:**

There is a link between poor short term auditory memory and children with school learning dysfunctions, dyslexia and ADD/ADHD. There are no previous studies which have evaluated the specific relationship between chiropractic and short term auditory memory.

### **Method:**

A same-subject pre-test/post-test quasi-experimental design was used with 26 paediatric participants of both genders ranging in age from 5 - 11 years, tested for short term auditory memory capacity (the ability to repeat numbers and follow a series of spoken commands) relative to age, before, during and after chiropractic treatment over a three month period.

### **Results:**

A high percentage of incompetent temporal sequential organization skills was found relevant to expected scores for their age (69.2% for number repetition and 80% for serial commands) consistent with the literature. After chiropractic intervention those with incompetence in both areas of temporal sequential organization showed improvement in both categories. The group as a whole improved by 61% in number repetition and 88.9% in serial commands.

### **Conclusion:**

Chiropractic may be an appropriate therapeutic and management intervention for children with short term auditory memory dysfunction and school learning difficulties.