

5<sup>th</sup> International Conference and Exhibition on

# Natural & Alternative Medicine

September 05-07, 2016 Beijing, China

## The effect of pediatric massage on young children's cognitive and behavioral well-beings

Zhang Jian Guo

The Chinese University of Hong Kong, Hong Kong

According to traditional Chinese medicine, one's cognitive well-being can be promoted when kidney, liver, and heart are functioning properly. Chinese massage therapy is known to enhance the function of heart, liver, and kidney, and improve the flow of qi and xuè and maintain the balance of yīnyáng, which can then improve one's physical and psychological health. However, very little is known of whether pediatric massage can promote young children's cognitive and behavioral well-being. The present study examined the effects of pediatric massage on enhancing cognitive and behavioral skills of typically-developing children. Thirty-three 3- to 6-year-old children from the same kindergarten participated and each received a three-month pediatric massage, with two sessions per week and twenty minutes per session. We administered tasks to assess their cognitive skills including memory (both verbal and nonverbal), reasoning abilities, attention, inhibition abilities, and behavioral and sleeping problems before (i.e., pretest) and immediately after (i.e., posttest) the pediatric massage. Their performance was compared to the control group, which had twenty age-matched children in the same kindergarten and did not receive any pediatric massage. Socio-economic status, amount of extra-curricular activities, and number of critical events were controlled. Results found that pediatric group performed significantly better than control group in nonverbal memory, reasoning, attention, and inhibition in the posttests. Pediatric group was also found to have fewer aggressive behaviors and better sleeping patterns than control group. Overall, pediatric massage is effective in bringing positive changes in young children's cognitive and behavioral well-being.

jgzhang@cuhk.edu.hk

## Analysis of heart rate variability with neural therapy

Nohora Angulo C, Daniel Botero R, Henry León A, María Teresa Domínguez-Plaja and Edward Javier Acero Mondragón

Universidad de La Sabana, Colombia

**Introduction:** Heart rate variability (HRV) is a parameter that analyzes more accurately how autonomic nervous system controls heart function. It is widely use in the evaluation of patients with prevalent worldwide chronic diseases such as hypertension, diabetes mellitus, asthma, dysmenorrhea, depression and insomnia, among others. There is evidence in the medical literature of acupuncture impact on HRV; but not with the use of Neural therapy.

**Objective:** Compare the effect of neural therapy and acupuncture in healthy subjects on the autonomic nervous system by analyzing the heart rate variability by nonlinear method.

**Methodology:** In a controlled environment with 25 healthy subjects, three registers of Heart Rate (HR) with a Polar RS800 Clock were performed in supine and standing. Each participant receives a stimulus with Neural therapy. Kubios HRV software program was use to analyze heart rate variability (HRV), discriminating the Low Frequency (LF) and High Frequency (HF) bands. For statistical analysis a non-linear method was used with a significance value of  $p < 0.05$ .

**Results:** With the encouragement of neural therapy, a significant difference was demonstrated in the LF / HF ratio and variable HF; which it is associated with a reduction in sympathetic activity, accompanied by an increase in the activity of the parasympathetic nervous system.

**Conclusions:** Neural Therapy showed a decreased response of the sympathetic system with increased parasympathetic response. This work showed that Neural therapy have a statistically significant impact ( $p < 0.05$ ) on the increase in the response of the parasympathetic nervous system, unlike the results obtained with acupuncture available in the literature.

nohora.angulo@unisabana.edu.co