Brain Electrical Activity Mapping (Beam) on Trait Anxiety among Malaysian Chinese Children

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ABSTRACT

Woefully, the twenty-first century is described as an era of anxiety (Malcolm, 2015; Karas, 2013). In fact, the increasing prevalence rate of anxiety disorder has afflicted children at alarming rates nowadays. However, early onset of childhood anxiety is still underestimated. Consistent and intense feeling of fear had affected them in various aspects like emotions, behaviours and cognitive functions throughout their developmental stage (Bittner et al., 2007; Pine, Cohen, Gurley, Brook, & Ma, 1998; Woodward & Fergusson, 2001). Without proper early intervention, children are at risk for anxiety disorders with more severe anxiety symptoms when they are growing up. In order to get rid of the elevating of prevalence rate for anxiety, understanding the etiology of the onset of anxiety should be given more concern. In fact, this Biopsychosocial model views anxiety disorders as the products of biological aspects (gene and brain mechanism), psychological aspect (beliefs, behavior, coping skills) and social aspect (environmental factor). Among these three aspects, biological attributed vulnerabilities formed the first anxious personality in children since birth and reduced their resilience towards psychological and social stressors later on in their life (Averill, 2015). For instance, trait anxiety, the prolong state of anxious feeling is much more impactful for children compared to state anxiety as this inborn anxious personality shaped the first default biological vulnerability to fear. Hight trait anxiety level be adopted by the individual and form anxious personality in children since birth (Miu et al., 2009; Miclea, Albu & Ciuca, 2009).

Keywords: Brain Electrical Activity Mapping (BEAM); Children; Chinese; Malaysia; Trait anxiety; Quantitative Electroencephalogram (qEEG)