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[Keynote Speech]: Evidence-Based Outcome Effectiveness Longitudinal Study on Three Approaches to Reduce Proactive and Reactive Aggression in Schoolchildren: Group CBT, Moral Education, Bioneurological Intervention

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Abstract : While aggression had high stability throughout developmental stages and across generations, it should be the top priority of researchers and frontline helping professionals to develop prevention and intervention programme for aggressive children and children at risk of developing aggressive behaviours. Although there is a substantial amount of anti-bullying programmes, they gave disappointingly small effect sizes. The neglectful practical significance could be attributed to the overly simplistic categorisation of individuals involved as bullies or victims. In the past three decades, the distinction between reactive and proactive aggression has been well-proved. As children displaying reactively aggressive behaviours have distinct social-information processing pattern with those showing proactively aggressive behaviours, it is critical to identify the unique needs of the two subtypes accordingly when designing an intervention. The onset of reactive aggression and proactive aggression was observed at earliest in 4.4 and 6.8 years old respectively. Such findings called for a differential early intervention targeting these high-risk children. However, to the best of the author's knowledge, the author was the first to establish an evidence-based intervention programme against reactive and proactive aggression. With the largest samples in the world, the author, in the past 10 years, explored three different approaches and their effectiveness against aggression quantitatively and qualitatively with longitudinal design. The three approaches presented are (a) cognitive-behavioral approach, (b) moral education, with Chinese marital arts and ethics as the medium, and (c) bioneurological measures (omega-3 supplementation). The studies adopted a multi-informant approach with repeated measures before and after the intervention, and follow-up assessment. Participants were recruited from primary and secondary schools in Hong Kong. In the cognitive-behavioral approach, 66 reactive aggressors and 63 proactive aggressors, aged from 11 to 17, were identified from 10,096 secondary-school children with questionnaire and subsequent structured interview. Participants underwent 10 group sessions specifically designed for each subtype of aggressor. Results revealed significant declines in aggression levels from the baseline to the follow-up assessment after 1 year. In moral education through the Chinese martial arts, 315 high-risk aggressive children, aged 6 to 12 years, were selected from 3,511 primary-school children and randomly assigned into four types of 10-session intervention group, namely martial-skills-only, martial-ethics-only, both martial-skills-and-ethics, and physical fitness (placebo). Results showed only the martial-skills-and-ethics group had a significant reduction in aggression after treatment and 6 months after treatment comparing with the placebo group. In the bioneurological approach, 218 children, aged from 8 to 17, were randomly assigned to the omega-3 supplement group and the placebo group. Results revealed that compared with the placebo group, the omega-3 supplement group had significant declines in aggression levels at the 6-month follow-up assessment. All three approaches were effective in reducing proactive and reactive aggression. Traditionally, intervention programmes against aggressive behaviour often adapted the cognitive and/or behavioural approach. However, cognitive-behavioural approach for children was recently challenged by its demanding requirement of cognitive ability. Traditional cognitive interventions may not be as beneficial to an older population as in young children. The present study offered an insightful perspective in aggression reduction measures.

Keywords : intervention, outcome effectiveness, proactive aggression, reactive aggression
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