'Rhythm And Movement for Self-Regulation' (RAMSR) in Hong Kong Kindergartens from Low Socio-Economic Backgrounds: A Randomized Controlled Trial

Research shows that at least 30% of children in economically developed countries display self-regulation problems (i.e., difficulties in managing their behavior, cognition, and emotions). Self-regulation is arguably the most crucial predictor of school readiness, academic achievement, and lifelong well-being. Large-scale longitudinal studies show that strong self-regulatory skills act as a buffer against poor development, especially in children from lower socio-economic backgrounds. It is therefore vital to identify effective interventions addressing early self-regulation. 'Rhythm And Movement for Self-Regulation' (RAMSR) is an innovative classroom intervention based on key cognitive, therapeutic, and educational components that enhance neurocognitive development. Similar to other novel interventions applied in Western and Eastern countries using music-related activities, RAMSR has shown positive effects on children's self-regulatory skills (Williams & Berthelsen, 2019).

Our research shows that Hong Kong kindergarten teachers: (a) rarely conduct activities involving coordinated rhythmic movement in classrooms, due to limited preparation; (b) lack pedagogical strategies to support children's self-regulation; and (c) perceive RAMSR to be suitable and viable in Hong Kong kindergartens and well-aligned with the local curriculum framework. These findings reveal an urgent need to design programs to train teachers in interventions like RAMSR, intended to increase children's exposure to rhythm and movement and with the potential to enhance their self-regulation. Our team is currently tailoring RAMSR for local use, conducting a pilot study, and developing a low-cost, easily scalable, and sustainable online program. The program combines synchronous and asynchronous interaction with university researchers, multiple opportunities for job-embedded collaborative learning, and resources for independent learning.

Using a cluster Randomized Controlled Trial intervention design with 14 kindergartens serving children from low socio-economic status, we will investigate:
1) the effectiveness of the online training program on teachers' ability to implement RAMSR, as measured by self-reports and expert observers;
2) the factors associated with different levels of implementation fidelity;
3) the impact of RAMSR, as implemented by teachers, on Kindergarten K1 children's self-regulation immediately after the intervention and six months later.

The project will fill an important knowledge gap regarding the effectiveness of online teacher training programs focusing on early self-regulation. Once the research is completed, we will disseminate the RAMSR online package across all Hong Kong kindergartens and offer policy advice to sustain and further enhance this teacher training effort. RAMSR has the potential to improve self-regulation of young children in Hong Kong, which will contribute to tackling socio-economic disparities and reduce a whole raft of societal costs.