

## **ORAL: Using Collective Intelligence to identify barriers to implementing and sustaining effective Fundamental Movement Skills interventions: A rationale and application example**

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**Objective:** To understand the multifaceted influences on Fundamental Movement Skills (FMS) interventions, this study trials Collective Intelligence(CI;Broome and Hogan, 2012)—an applied systems science approach—to facilitate a group consultation to identify barriers associated with the implementation and sustainability of FMS interventions. **Methods:** 20 researchers/practitioners in the United Kingdom and Ireland who have designed/implemented/evaluated FMS interventions were invited via email to generate five barrier statements in response to the question: “From your understanding and previous involvement in FMS interventions, what do you consider are the key barriers to the adoption, implementation and institutionalisation of effective FMS interventions targeting children?” A group of five researchers were further invited to participate in a one-day CI workshop to review and structure these barriers. Through a computer-mediated modelling process, a systems model was derived from group member’s reasoning and consensus-based voting on problem relations. Participants then conducted action mapping to solve the problem based on the logical relations between barriers reflected in the model. **Results:** A total of 58 barriers were generated in response to the trigger question and organised into 13 barrier categories. In CI workshop, participants generated a structural map describing the system of relationships between the ten critical barriers. As informed by this map, participants generated two sets of solutions to barriers in relation to Government and Institutional and Curricular Conflicts. **Implications:** CI offers a way to disentangle the complex interdependent influencing factors that constrain FMS intervention effectiveness, therefore is relevant for FMS researchers to integrate consideration of implementation and sustainability into the life span of an intervention (planning, design, delivery and evaluation) in efforts to support best practice in the translation of research evidence into practice.