

## Dr. Alex Chan's impact case

### Empowering underprivileged parents to support Executive Functions (EF) of their children

Dr. Alex Chi-keung Chan, in collaboration with Dr. J. J. Cutuli at Rutgers University, Dr. Janette E. Herbers at Villanova University, Dr. Xiao Zhang at the University of Hong Kong, and Dr. Bernard Pak-ho Wong at the Chinese University of Hong Kong, received funding for two RGC projects entitled "*Executive Function Skills and Early School Success in Young Chinese Children from Low-Income Families*" (UGC/FDS15/H02/14) and "*Developing and Validating a Parent-focused Intervention to Enhance the Executive Function Skills of Young Chinese Children from Low-income Families*" (UGC/FDS15/H01/17).

The key findings of these projects showed that an authoritative parenting style (warmth, democratic, and reasoning) predicted higher level and growth in their children's EF performance. Nevertheless, parents from low-income families had significantly lower scores for authoritative parenting but significantly higher scores for lack of confidence in parenting. These findings suggested an urgent need to develop a localized parent-based intervention to empower parents from low-income families so as to enhance the EF development of their young children.

### Enhancing parents' understanding on the importance of supportive and scaffolding parenting to children's EF development

Around 20 intensive psychoeducational workshops were delivered by the research team to about 120 parents from eight partnership kindergartens between September 2018 and October 2020. These workshops – co-organized with these eight partnership schools – focused on the roles of parents in cultivating a home environment and parent-child relationship that can nurture the core EF capabilities of their children. Results of the feedback survey from these workshops indicated that about 70% of the participating parents strongly agreed and 30% agreed that the workshops could enhance their understanding on the importance of practicing supportive and scaffolding parenting to improve their parent-child communication and relationship so as to facilitate good EF development of young children.



Workshop for Kindergarten Parents from a Kindergarten in Sau Mau Ping



Workshop for Kindergarten Parents from a Kindergarten in Tuen Mun

## Strengthen the EF of children using handbook and practice kit

A handbook entitled “The Key for Building the Future of Children: Cultivating the Executive Functions of Young Children” (〈建立孩子未來的鑰匙：培育幼童的執行功能技巧〉實用手冊) and a take-home practice kit (including an EF-focused board game, EF-themed picture books, and EF-based parent-child interactive activities) were developed to equip parents with supportive and scaffolding parenting skills to facilitate the EF of young children. The handbook and take-home practice kit has also been provided to 15 collaborative kindergartens for sharing with their parents, in addition to being used for co-organizing guest talks or seminars with the research team to introduce the handbook and tool kits to their parents. Almost four-fifths of 118 participating parents (79%) indicated that the handbook and take-home practice kit were very helpful tools for guiding them to practice scaffolding parenting to support their children’s EF development.

## Improving parent-child communication and relationships

The findings showed that 71% of parents studied in 35 parents-child dyads had significant improvement in their authoritative parenting; 78% of parents found improvement in their parent-child communication; 73% of parents found improvement in their parent-child relationship.



Take-Home EF Practice Kit

## Raising local professionals’ awareness on the importance of developing parents-based intervention to support underprivileged parents and their young children

Ten workshops were conducted at eight kindergartens and two primary schools for about 150 administrators, teachers, social workers, and paraprofessionals between September 2017 and October 2019 to promote the importance of EF skills in early childhood development and explain how schools, educators, and service professionals can support and empower underprivileged parents to enhance the EF development of their children through parent-based intervention. Results of the feedback survey from these workshops indicated that about 95% of them agreed or strongly agreed that it is critical to advocate and develop home-based intervention to engage and support low-SES parents.



Parents' Handbook for Supporting the EF Development of Their Young Children



Workshop for Teachers and Paraprofessionals from Three Kindergartens in Kowloon East Area