



Using AI-Based Sensing Systems to Measure Preschool Children's Peer Interactions

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Room 401 – 402, Meng Wah Complex, HKU

Chair: Professor Xiao Zhang

Registration:

https://hkuems1.hku.hk/hkuems/ec_regform.aspx?guest=Y&ueid=97472



Abstract:

Children's peer interactions in early childhood education classrooms represent an important mechanism for language and social development. We present findings from the PEERS peer-mediated intervention, which was designed to increase the language and social interactions of children who are isolated from the classroom social network. Implemented in 30 preschool classrooms, and using an experimental design, we report positive impacts of the PEERS intervention on language and social interactions of isolated children based on observational measures. However, this study also used an AI-based sensing system in which children wore voice-activated recorders and motion sensors during play interactions to examine intervention impacts using automated data-collection procedures. We describe the sensor system processing pipeline, which uses artificial intelligence to continuously monitor children's peer-based interactions in the classroom, and findings from this system to further understand impacts of the PEERS intervention on children's peer interactions.

About the speaker:



Laura Justice is Distinguished Professor of Educational Psychology at The Ohio State University. Justice is also Editor-in-Chief of Early Childhood Research Quarterly. Justice's research focused on early cognitive and social development of children, with a particular focus on children experiencing early adversities, including poverty and disability. Justice has published more than 300 peer-reviewed research articles, and her research is currently funded by the National Institutes of Health, Institute of Education Sciences, and Spencer Foundation.

~ All are welcome ~

For enquiries, please contact the Office of Research, Faculty of Education at hkchow@hku.hk