

## **Investigating Parents' Assessment Literacy in the Digital Era and Its Association with Students' Academic Learning: Instrument Development and Model Validation**

Parents can affect students' learning through their involvement in varied assessment processes. However, many non-expert parents lack assessment literacy to deal with students' assessment-related issues in the digital era (P-ALDE), which can hinder student learning through inappropriate actions (e.g., overhelping, exerting academic pressure, and, even worse, resisting innovative assessment forms such as self- and peer-assessment). Moreover, the rapidly evolving technology, which enables extensive assessment information and requires digital labor, may have fundamentally affected parental involvement in assessment-related issues. While research to date has focused largely on students and teachers, more needs to be known about P-ALDE and its effects on student achievement. However, no published instrument measures P-ALDE. Without such an instrument, we cannot investigate P-ALDE and its influence on student learning, let alone design and test the effectiveness of parent intervention programs. This study seeks to address this issue by (a) developing and validating an instrument to measure knowledge, beliefs, and practices of P-ALDE, (b) investigating the P-ALDE profiles of parents in the local community, and (c) exploring the effect of P-ALDE on students' academic achievement. Guided by our P-ALDE's definition and individual interviews with experts and parents, we will develop domains and items of each P-ALDE dimension. Experts will check these items for substantive and content validity. Feedback from interviews with parents will be used to refine the items. The parents or main caregivers of 300 students in Hong Kong will be invited to pilot test and semi-finalize the P-ALDE instrument (pilot study). Based on the responses from another 300 parents, the scale will be examined to determine the dimensionality of the P-ALDE items, each item's quality, each domain's reliability, and the scales' external validity (against actual daily practices) in a Rasch approach (main study). Furthermore, we will investigate P-ALDE profiles and test our theoretical model of P-ALDE and its association with students' academic achievement with structural equation modeling using data from the main study. Upon completion of the project, the developed P-ALDE instrument can be utilized by scholars to conduct quantitative studies on parents such as the antecedents of P-ALDE. The findings regarding the local P-ALDE profile and its impact on students' academic achievement will provide valuable insights for stakeholders to understand the strengths and weaknesses of P-ALDE in Hong Kong and to aid in the planning of parental intervention programs aimed at enhancing students' learning.