

546

QUASI-EXPERIMENTAL STUDY OF A LEARNING COLLABORATIVE TO IMPROVE PUBLIC PRESCHOOL QUALITY AND CHILDREN'S LANGUAGE OUTCOMES IN CHILE

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Background Decades of research shows that early childhood interventions can positively impact children's short- and long-term health, academic and economic outcomes, but that interventions' effectiveness depend on their quality. Interest in continuous quality improvement (CQI) methods is rising among early childhood clinicians, educators and policymakers. We report on a study that integrated CQI into an existing professional development program that aimed to improve the quality of preschool education in Chile and the outcomes of participating children.

Objectives To analyze how CQI methods can be applied in education to impact child development, in the context of a project centered on literacy instructional strategies supported by health, socio-emotional skills and family involvement.

Methods Teachers from 40 low-income classrooms received training in instructional strategies. A subset of 18 early adopters participated in a Collaborative that taught CQI methods and facilitated shared learning. Children's language skills were assessed at the beginning and end of a 2 year period using an internationally validated test. Quasi-experimental methods (propensity scores and inverse-propensity weighting) were used to estimate the impact of professional development in instructional strategies combined with CQI methods versus professional development in instructional strategies alone.

Results Children in classrooms whose teachers received professional development in language instruction plus CQI methods had larger increases in language skills (vocabulary, effect size 0.31, $p < 0.05$) than children whose teachers received language instructional strategies alone.

Conclusions CQI may be a valuable addition to promote change via professional development in low-income schools in Chile and warrant further examination for early childhood interventions in diverse contexts globally.