Examining Infant-Toddler Care Quality: Insights from a Statewide Early Childhood Program



Cara L. Kelly, Diane M. Horm, Denise Vega Ruvalcaba, & Craig K. Van Pay Early Childhood Education Institute, University of Oklahoma

Abstract

The primary goal of this study is to examine the associations among aspects of quality and infant-toddler outcomes within a statewide program using multiple years of data and a newer measure of observational quality designed for infant-toddler programs.

Research Questions

- Are teachers' characteristics associated with observed levels of quality in center-based infant and toddler classrooms?
- Are teachers' characteristics associated with infants' and toddlers' teacher-reported social-emotional development?
- Is observed classroom quality associated with infants' and toddlers' teacher-reported social-emotional development?

Sample

Our study relied on data from a larger evaluation of a statewide early education initiative serving children from birth through age 3 who are low-income in Oklahoma (OECP, 2024). For the current study, we restricted our sample to classrooms that served infants and toddlers, and only included teachers who had complete survey and observation data. Our sample included 93 teachers and a range of 834-1,016 infants and toddlers, depending on the outcome measure.

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Methods

Measures

We used a range of measures, including classroom observations, teacher surveys, and teacher-reported child outcomes:

Measure Name	Construct
Quality of Care for Infants and Toddlers (QCIT; Atkins-Burnett et al., 2015)	Observed classroom quality
Teacher survey	Years of experience, level of education, and perceptions of interacting with children (Modernity Scale; Schaefer & Edgerton, 1985)
Devereux Early Childhood Assessment for Toddlers (DECA-I/T; Mackrain et al., 2007)	Teacher-reported social-emotional skills of infants and toddlers

Analytic Plan

We ran a series of ordinary least squares (OLS) regression analyses to answer our research questions. To handle missing data, we used multiple imputation (MI), following best practices in applied research (Rubin, 1987; Enders, 2010). All models accounted for nesting by clustering at the teacher. We standardized our predictor and outcome variables to have a mean of 0 and a standard deviation of 1 to allow for comparison across models.

Findings

Research Question 1

 We found limited associations between teachers' characteristics and observed levels of quality in infant-toddler classrooms.

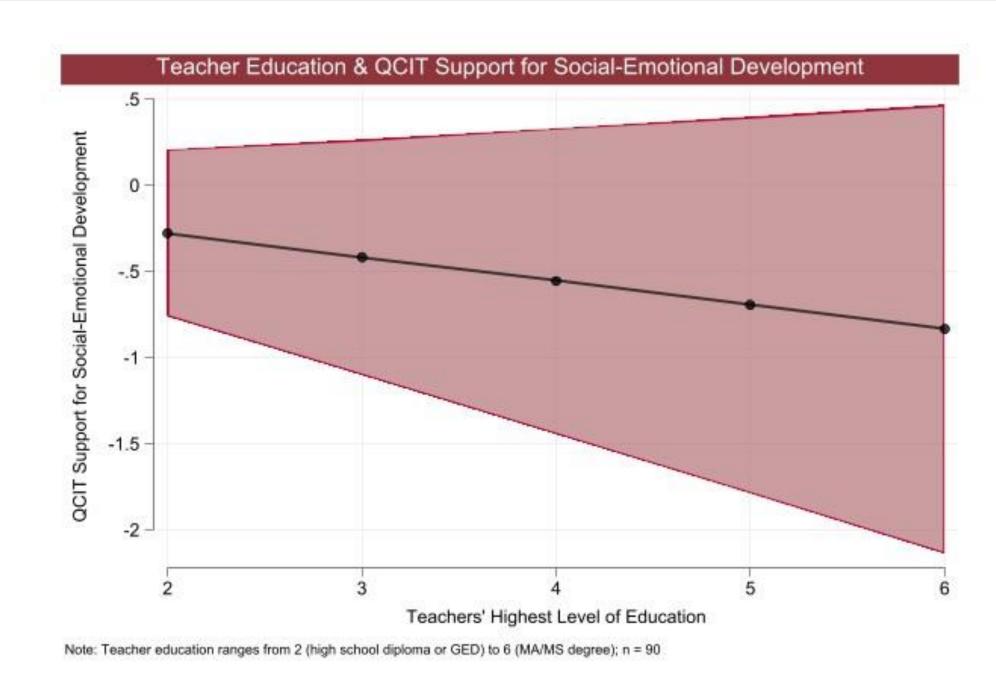
Research Question 2

 We did not find significant associations between teachers' characteristics and infants' and toddlers' social-emotional development.

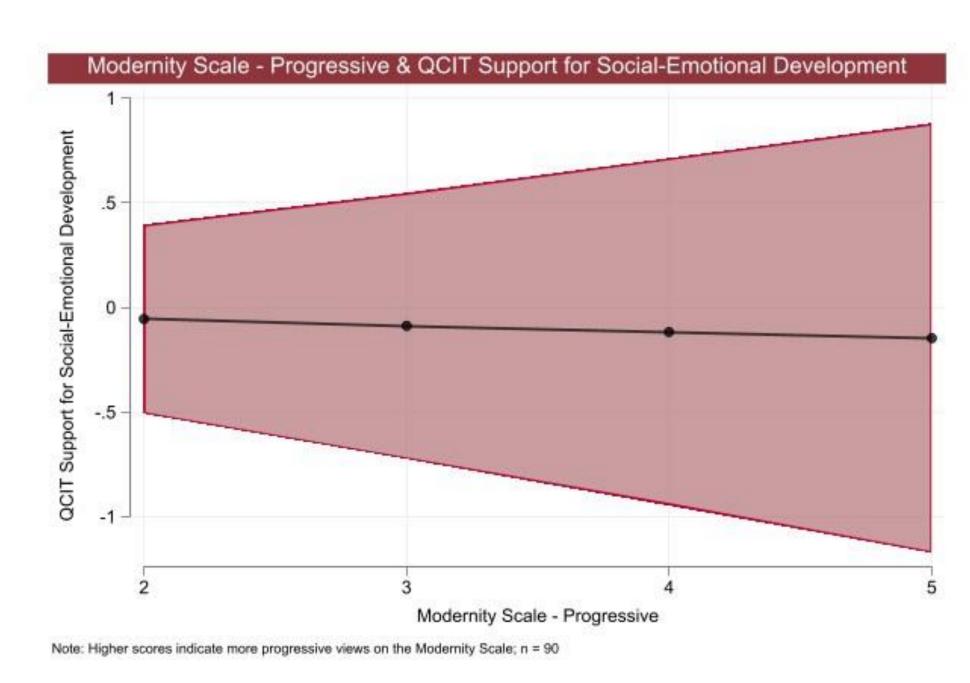
Research Question 3

 We did not find significant associations between observed classroom quality and infants' and toddlers' social-emotional development.

Research Question 1 Results



 Our results suggest that teachers with higher levels of education scored lower on the QCIT Support for Social-Emotional Development domain (p < .05).



Our results suggest that teachers with more progressive views on interacting with children scored higher on the QCIT Support for Social-Emotional Development domain (p < .05).

Conclusion & Implications

Although our results provide limited evidence linking teacher characteristics, observed quality, and infants' and toddlers' social-emotional development, our study highlights the importance of child-centered perspectives in supporting developmental outcomes and builds on prior research suggesting that higher levels of formal education are associated with more child-centered views (Beisly & Lake, 2021; Fusaro et al., 2022).

Findings point to a disconnect between formal education and infant-toddler classroom practices. Our unanticipated results emphasize the need for more specialized coursework and training focused on infanttoddler development to better prepare educators for this unique age group.



