

Early Childcare in Context: Institutional Variation and Adolescent Development in Greater China

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Early childhood education and care (ECEC) is widely viewed as a potential intervention for promoting child development and reducing socioeconomic inequality, yet existing research reports mixed findings on its long-term consequences. This study develops an institutional approach to early childcare and adolescent development by examining whether childcare participation before age three is associated with cognitive and socioemotional outcomes, whether these associations vary by family socioeconomic status, and whether they differ across institutional contexts in Greater China. Using PISA 2018 data from mainland China, Hong Kong, Macao, and Taiwan, the analysis includes 19,865 students and examines six adolescent outcomes: reading, mathematics, science, school belonging, resilience, and work mastery. Early childcare is measured by retrospective reports of ECEC entry before age three, while family background is captured by parental education and parental occupational status. The findings show that early childcare participation is socially selective in the pooled sample, with participants generally coming from more advantaged families, although this pattern varies across societies. In pooled models, early childcare is positively associated only with reading performance and is not significantly related to mathematics, science, or socioemotional outcomes. Interaction models provide little evidence that early childcare systematically benefits either advantaged or disadvantaged students more strongly. The most important finding is substantial institutional heterogeneity: early childcare is positively associated with some cognitive outcomes in mainland China, largely unrelated to outcomes in Hong Kong, negatively associated with cognitive outcomes but positively associated with school belonging in Macao, and negatively associated with all three cognitive outcomes in Taiwan. These divergent patterns suggest that early childcare is neither universally compensatory nor uniformly reproductive. Instead, its long-term developmental implications depend on institutional context. By shifting attention from average effects to contextual variation, this study contributes to a more sociological understanding of how early childhood institutions shape developmental inequality.