The Influence of Parental Self-Efficacy and Perceived Control on the Home Learning Environment of Young Children

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ABSTRACT

OBJECTIVE: To: 1) examine sociodemographic factors associated with high parental self-efficacy and perceived control, and 2) determine how self-efficacy and control relate to the home learning environment (HLE), including whether they mediate the relationship between sociodemographic characteristics and HLE, among low-income parents of young children.

METHODS: Cross-sectional survey of English- and Spanish-speaking parents, 18 years of age and older, with children 15 to 36 months old, to assess parental self-efficacy, perceived control, HLE, and sociodemographic characteristics. Bivariate analysis identified sociodemographic predictors of high self-efficacy and control. Separate multivariate linear regression models were used to examine associations between self-efficacy, control, and the HLE. Formal path analysis was used to assess whether self-efficacy and control mediate the relationship between sociodemographic characteristics and HLE.

RESULTS: Of 144 participants, 25% were white, 65% were immigrants, and 35% completed the survey in Spanish. US-born subjects, those who completed English surveys, or who had higher educational levels had significantly higher mean self-efficacy and perceived control scores ($P < .05$). Higher self-efficacy and perceived control were associated with a positive change in HLE score in separate multivariate models (self-efficacy $\beta = .7$ [95% confidence interval (CI), 0.5–0.9]; control $\beta = .5$ [95% CI, 0.2–0.8]). Self-efficacy acted as a mediator such that low self-efficacy explained part of the association between parental depressive symptoms, immigrant status, and less optimal HLE ($P = .04$ and $< .001$, respectively).

CONCLUSIONS: High parental self-efficacy and perceived control positively influence HLEs of young children. Self-efficacy alone mediates the relationship between parental depressive symptoms, immigrant status, and less optimal early home learning.

KEYWORDS: early childhood development; home learning; parenting; poverty; self-efficacy

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WHAT'S NEW

Immigrant status was a strong predictor of lower parental self-efficacy among a sample of low-income parents with children aged 15 to 36 months. Parental self-efficacy mediated the relationship between depressive symptoms, immigrant status, and lower-quality home learning environments.

COMPARED WITH THEIR more advantaged peers, children living in poverty are at greater risk of developmental delays, specifically in domains related to language, executive functioning, and social-emotional development.[1,2] However, substantial evidence shows that positive parent–child relationships[3] and a stimulating home environment during the first 3 years of life can significantly promote optimal brain growth, healthy development,[4] and might buffer against the adverse effects of poverty on child development.[5]

Despite the strong association between poverty, minority status, and a less enriching home learning environment (HLE) at the population level, many low-income families do provide stimulating home environments for their children.[6,7] Less is known about parent beliefs and attitudes associated with positive home environments among families who face adversity. Understanding parental perceptions of their ability to affect their young child's development might have implications for improving the HLE. Existing theory and research propose that 2 factors, parental self-efficacy and perceived control, might critically affect a parent's ability to promote their child's development.

Parental self-efficacy (hereafter referred to as "self-efficacy") is defined as parent knowledge and confidence to effectively manage the tasks and situations of

parenthood.[8,9] Self-efficacy, which has been primarily studied in middle class parents of school aged children, is predictive of positive parenting practices and child outcomes[10] including greater parental academic involvement,[5,11] fewer child behavioral problems[12] and improved school readiness.[13] Furthermore, higher self-efficacy is associated with more responsive caregiving practices in high-risk mothers of infants (ie, teenage mothers and those with depression).[14] The relationship of self-efficacy to tasks that promote social and cognitive development in the home has not been well studied, particularly among low-income families with children younger than age 5.

Parental perceived control (hereafter referred to as "control") is defined as parent beliefs about their personal effect on a specific outcome, in this case their child's development and learning.[15] Few studies have examined the association between control and parent–child relationships[16] or developmental outcomes,[12] revealing important gaps in the literature. Despite the lack of data on control and child outcomes, control might be a particularly important factor to assess among families disempowered by structural and sociocultural barriers such as racism and exposure to trauma.[17]

Although self-efficacy as well as control might influence parent behaviors, previous research shows that they act independently as distinct belief systems.[18] For example, a mother might believe in her ability to manage her toddler's difficult behavior, but might not believe that her actions will affect how the child will behave toward others. Such belief systems also exist in the context of varying social circumstances. Personal histories of violence, inadequate access to housing and food, or lack of social support might lead to generally lower perceptions of self-efficacy and control, but it remains unclear the degree to which adverse social circumstances might differentially affect parental beliefs and behaviors that promote positive child development.

We therefore conducted a cross-sectional survey in a diverse, low-income population of parents with young children (15–36 months old) to better understand which parent and child factors predict self-efficacy and control and how these perceptions relate to the HLE (the amount of developmentally stimulating activities provided in the home). We hypothesized that older parent age, more education, and fewer depressive symptoms would be predictors of higher levels of self-efficacy and control. We further hypothesized that parents with higher levels of self-efficacy and control would score higher on measures of a stimulating HLE, and that self-efficacy and control would mediate the association between parent factors and the HLE.

METHODS

STUDY DESIGN AND PARTICIPANTS

We surveyed English- and Spanish-speaking parents of healthy children aged 15 to 36 months, recruited from an urban primary care clinic and 3 Women, Infants, and Children nutrition centers in the Boston area. These recruitment sites serve a diverse population of US-born and immigrant families from Central America, South America, the Caribbean, Asia, and Africa. Potential participants were excluded if they were younger than 18 years old, or if the index child had a significant medical condition that might affect their development such as autism. Participants gave verbal informed consent to participate and were compensated $10 for their time. Surveys were conducted by research assistants either in person or by phone in the language of the participant's choice from December 2014 through May 2015. Time for survey completion ranged from approximately 30 minutes to 1 hour. The study was deemed exempt by the authors' internal review board.

MEASURES

PARENTAL SELF-EFFICACY

We used 2 subscales (16 questions) from the Self-Efficacy for Parenting Tasks Index–Toddler Scale[8] to assess self-efficacy in 2 domains that are critical to early childhood learning: empathetic responsiveness and teaching (cognitive stimulation).[19] For example, one item states: "Helping my child learn colors, names of objects, etc, is not one of my strongest points." Participants responded to statements on a 6-point Likert scale from 1 = strongly disagree to 6 = strongly agree (total range, 16–96). In previous studies, this tool was validated against the Maternal Efficacy Questionnaire[14] and the Parenting Sense of Competence Scale.[20] Developers of the tool report a Cronbach α for empathetic responsiveness questions of .71 and .73 for teaching questions.[8] In this sample, the Cronbach α for the 16 items was .77 (empathetic responsiveness = .70 and teaching = .73).

PARENTAL PERCEIVED CONTROL

Six items from the Parent Opinion Survey[15] were used to assess parental perception of their personal control over their child's development, social relationships, and behavior. As an example of the measure, one item states: "I believe that the way I treat my child will strongly influence how he/she will behave toward others." We modified this instrument by adding 2 similarly worded questions specific to parents' perceived control over their child's learning and cognitive development, for a total of 8 items. The final measure is not a validated instrument. Participants responded to statements on a 6-point Likert scale from 1 = strongly disagree to 6 = strongly agree (total range, 8–48). The Cronbach α for these 8 items was .82.

HLE

The 25-item Home Learning Experiences subscale from the Home-Learning Environment Profile[21] was used to assess home activities and experiences that promote early learning. Items are used to assess frequency of specific school readiness activities and common family or cultural practices that support learning and development. Each item is rated on a 4-point Likert scale: 1 = never, 2 = once in a while, 3 = fairly often, 4 = often, or 0 = does not apply