



# Predicting self-regulation and vocabulary and academic skills at kindergarten entry: The roles of maternal parenting stress and mother-child closeness



Erin Harmeyer<sup>a,\*</sup>, Jean M. Ispa<sup>b</sup>, Francisco Palermo<sup>b</sup>, Gustavo Carlo<sup>b</sup>

<sup>a</sup> University of Wyoming, United States

<sup>b</sup> University of Missouri, United States

## ARTICLE INFO

### Article history:

Received 9 March 2015

Received in revised form 7 April 2016

Accepted 3 May 2016

### Keywords:

Maternal parenting stress

Toddlerhood

Self-regulation

School readiness

## ABSTRACT

We examined the indirect relations between maternal parenting stress when children were 15 months of age and children's vocabulary and academic skills when they were about to enter kindergarten, testing for potential mediation by mother-child closeness and children's self-regulation skills. Participants had been involved in the Early Head Start Research and Evaluation Project and included 1760 European American, African American, and Hispanic low-income mother-child dyads. Structural equation modeling revealed that mothers' parenting stress when children were 15 months old was inversely related to children's vocabulary and academic skills just prior to kindergarten, and that mother-child closeness at 25 months and children's pre-kindergarten self-regulation skills consecutively mediated these associations in a three-path mediation model. The findings highlight the benefits of mother-child closeness in toddlerhood, and negative implications of maternal parenting stress. The discussion focuses on how maternal parenting stress is related to later maternal behavior, ultimately shaping child outcomes.

© 2016 Published by Elsevier Inc.

## 1. Introduction

Researchers have found that parenting stress, or parents' subjective experience of distress regarding the parenting role (Abidin, 1992), can hinder children's early academic skills, including vocabulary and approaches to learning, in part via diminished parental cognitive stimulation (Ayoub, Vallotton, & Mastergeorge, 2011; Chazan-Cohen et al., 2009; Noel, Peterson, & Jesso, 2008). Importantly, the contributions of parental stress to children's early academic skills are likely to operate indirectly via intervening factors, such as parent-child relationship qualities and children's socioemotional adjustment. However, research that examines these indirect processes in early childhood is limited. The goal of the present study was to investigate how low-income mothers' parenting stress may indirectly impact vocabulary and early academic skills of children just before kindergarten entry via mother-child closeness and children's self-regulation skills.

### 1.1. Poverty, maternal parenting stress, and pre-kindergarten school readiness

For children to succeed when they reach kindergarten, they must be ready for the demands of a school day, such as following directions, paying attention, and understanding basic academic terms (Rimm-Kaufman, Pianta, & Cox, 2000). Children who enter school with strong early academic and social skills are likely to adjust well to school and to complete high school (Enslinger & Slusarcick, 1992). Unfortunately, kindergarten teachers seem to be in wide agreement that many of their students are not ready to succeed academically, with a nationally representative sample of kindergarten teachers reporting that just 26% of first-time kindergarten students demonstrated positive approaches to learning "very often." Supporting the validity of teachers' views, fall approaches to learning scores were positively associated with mathematics, reading, and science scores in kindergarten and first grade (Kena et al., 2015). School readiness is an especially serious problem for children in low-income families (Duncan & Magnuson, 2013). Thus, it is important to identify the factors that affect children's academic skills, particularly for children growing up in poverty.

Research identifying the skills most important for children's readiness to start school commonly focuses on aspects of socioe-

\* Corresponding author.

E-mail address: eharmeyer@uwyo.edu (E. Harmeyer).

motional functioning, early numeracy, and language skills. One key aspect of socioemotional functioning is self-regulation, or the ability to focus attention and exercise inhibitory control – that is, control automatic responses by restraining irrelevant responses while initiating nondominant adaptive solutions (Duncan et al., 2007; Son, Lee, & Sung, 2013). Self-regulation skills are critical for school success because children who are strong self-regulators are able to focus attention and engage in classroom content (Blair & Razza, 2007; McClelland, Cameron, Wanless, & Murray, 2007). Additionally, researchers have found that children's self-regulation skills predict math and reading scores concurrently and longitudinally (Guimard, Hubert, Crusson-Pondeville, & Nocus, 2012; McClelland, Acock, & Morrison, 2006).

Unfortunately, much research suggests that poverty hinders the development of these skills and that low-income children are more likely than middle-income children to experience negative outcomes in school, in part due to regulatory deficits (Blair et al., 2011; Brock, Rimm-Kaufman, Nathanson, & Grimm, 2009; Evans & English, 2002). For example, Duncan and Murnane (2014) found that at the start of the school year, kindergarten teachers rate higher-income students ahead of children from low-income families on measures of attention, engagement in schoolwork, and early math and literacy skills, and these gaps had not decreased at 5th grade. The individual and relational mechanisms through which poverty affects families likely underlie such deficits (Yoshikawa, Aber, & Beardslee, 2012).

Rates of depression and general stress are high among low-income mothers with young children. For example, among mothers participating in the Early Head Start Research and Evaluation Project (EHSREP), almost half (48%) suffered from a moderate to severe number of depressive symptoms at the study's outset. At this time, a quarter of the mothers were pregnant; the rest had infants younger than 12 months of age. Pregnant women were especially likely to be at risk of depression; 68% reported clinically significant levels of depressive symptoms. When children were 1 year old, and two years later when children were age 3, 33% of mothers scored above a clinical cutoff for depressive symptoms. For 12% of the mothers, depression was chronic as reflected by high scores at both time-points (Administration for Children and Families, 2006). A recent study of low-income mothers in Maryland uncovered the same pattern; over half reported feeling depressed, hopeless, or sad (Goldhagen, Harbin, & Forry, 2013).

Families living in poverty contend with many more stress-inducing circumstances than more advantaged families, including higher probabilities of family instability, food insecurity, substandard housing, inadequate transportation, low-status work with little job security, mismatch between work hours and the hours of most child care establishments, and neighborhood violence (Evans, Chen, Miller, & Seeman, 2012; Heberle, Thomas, Wagmiller, & Briggs-Gowan, 2014; Ispa, Thornburg, & Fine, 2006). Such contextual barriers contribute to difficulties coping with the psychological demands of parenting (Conger, Ge, Elder, Lorenz, & Simons, 1994; Garbarino, Vorrasi, & Kostelny, 2002; Magnuson & Duncan, 2002). Moreover, low life satisfaction, greater general psychological distress, and parenting stress tend to co-occur (Crnic & Greenberg, 1990; Thompson, Merritt, Keith, Bennett, & Johndrow, 1993). This problem is compounded by very limited access to affordable mental health treatment (Ayoub, Bartlett, Chazan-Cohen, & Raikes, 2014).

### 1.2. Maternal parenting stress: indirect links to child academic skills through mother-child closeness

Parenting stress differs from general depression in that general depression is typically defined in broader terms and as involving feelings of malaise or sadness in regards to many aspects of daily living, whereas parenting stress involves negative feelings stem-

ming specifically from the parenting role. For example, in addition to tapping general distress, the subscales of the widely used Parenting Stress Index assess the degree to which parents find parenting overly restrictive and emotionally burdensome, and the extent to which they feel that their children have less desirable qualities than other children (Abidin, 1990).

We focus on parenting stress in toddlerhood because this developmental period is challenging for many parents due to heightened negativity and oppositionality as children strive for autonomy (Keenan & Wakschlag, 2000; Williford, Calkins, & Keane, 2007). In fact, Ayoub et al. (2011) found that in the EHSREP sample, children's self-regulation scores dipped at 24 months as compared to their scores at 14 and 36 months. Moreover, parenting stress during children's first years may have implications for future developmental outcomes. For instance, Benzie, Harrison, and Magill-Evans (2004) found that parenting stress during infancy predicts behavior problems in later childhood. Given the positive association between depressive symptomatology and parenting stress (Whiteside-Mansell et al., 2007), studies indicating that maternal depression during infancy is more strongly linked to long-term adjustment than maternal depression when children are older underscore the importance of examining the longitudinal implications of early parenting stress (Bureau, Easterbrooks, & Lyons-Ruth, 2009; Murray, Cooper, & Hipwell, 2003).

Belsky (1984) asserted that parents' psychological well-being is a key factor in parenting and children's development because it affects parents' functioning in the childrearing role, and because parents who are psychologically healthy are better able to enlist valuable outside support. In support of this idea, others have found that parenting stress, an indicator of psychological well-being, predicts low child-directed nurturance and positivity, low dyadic pleasure, and the use of inconsistent, strict, and power-assertive disciplinary practices (Anthony et al., 2005; Crnic, Gaze, & Hoffman, 2005; Crnic & Greenberg, 1987; Deater-Deckard, 2004; Deater-Deckard & Scarr, 1996). Further, multiple studies show negative linkages among various measures of maternal stress and children's pre-academic skills, including receptive and expressive language skills and approaches to learning (Ayoub et al., 2011; Chazan-Cohen et al., 2009; Noel, Peterson, & Jesso, 2008).

Attachment theory (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1969) complements the process model of parenting in highlighting parent-child closeness as central in children's development. A large body of research supports this premise, suggesting that maternal sensitivity and positive regard, behaviors that promote mother-child closeness, predict a range of concurrent and future positive child outcomes, including verbal and math ability (Downer & Pianta, 2006; Harris, Sideris, Sipwell, Burchinal, & Pickett, 2014). Maternal sensitivity and positive regard also predict children's scores on tests of language development, math skills, and general cognitive development, perhaps in part because self-regulation is compromised when mothers are less sensitive (Connell & Prinz, 2002; Downer & Pianta, 2006; Harris et al., 2014; Pungello, Iruka, Dotterer, Mills-Koonce, & Reznick, 2009; Tamis-LeMonda, Shannon, Cabrera, & Lamb, 2004).

### 1.3. Maternal parenting stress: an indirect influence on early vocabulary and academic skills via self-regulation

Early caregiving is a central mechanism influencing self-regulation; it is through interactions with caregivers that children are exposed to regulatory strategies and given the chance to develop their own self-regulation skills (Kopp, 1989). Some hypothesize that exposure to parenting stress directly impacts children's self-regulation in part because parents who are stressed may model ineffective coping strategies (Halberstadt, Crisp, & Eaton, 1999). This may be one reason why high parenting stress is directly linked

Download English Version:

<https://daneshyari.com/en/article/6840716>

Download Persian Version:

<https://daneshyari.com/article/6840716>

[Daneshyari.com](https://daneshyari.com)