Parenting as a Proximal Mediator for Early Environmental Harshness and Children’s Effortful Control

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Introduction

Investigation linking proximal and distal early environmental cues to effortful control could facilitate a more nuanced understanding of early environmental effects on development, particularly for children in resource-scarce environments.

This study investigates early environmental mechanisms involving proximal cues from parenting and distal cues from neighborhood that shape effortful control in a sample of low-income families.

Based on psychosocial acceleration theory (Belsky et al., 1991), early harsh experiences:
- serve as cues about levels of harshness and support in the environment;
- adaptively shape developmental trajectories to match the environment;
- may have implications for the development of effortful control.

Effortful control:
- future-oriented aspect of self-regulation (Rothbart & Rueda, 2005);
- associated with increased prosocial behaviors and overall school competence (Diamond, 2006);
- may not be as adaptive as impulsivity in harsh environments (Wenner et al., 2013).

Hypothesis: Distal cues from neighborhood harshness will negatively predict effort control and be mediated by more proximal cues from mother’s and father’s harsh parenting.

Methods

Sample
Economically disadvantaged families (N = 1,745) from Building Strong Families relationship skills intervention study; 62% mothers and 75% fathers identified as Black/African American.

Latent Constructs
- Neighborhood harshness: 8 interviewer-rated items at 36 months (e.g., general condition of face-block; presence of drug/alcohol-related litter).
- Parenting harshness: 2 observed items during a 2-bags semi-structured play task with mothers and fathers separately at 36 months (i.e., parent’s negative regard and parent’s intrusiveness).
- Effortful control: 4 interviewer-rated items at 36 months (i.e., task persistence, attention span, body movement – reversed, and attention to directions).

Multiple Imputation
Missing data were treated with multiple imputation using a chained equation method (Enders, 2010).

Measurement model confirmatory factor analyses
Conducted first for each latent variable (Table 1).

Path analyses
Estimated using structural equation modeling with a maximum likelihood parameter estimator (Figure 1).

Conclusions & Implications

- Distal and Proximal Cues: Results suggest that the negative relationship between a distal cue, neighborhood harshness, and effortful control in early childhood is partially explained by more proximal cues from mothers’ harsh parenting, but not fathers’.
- Differential Effects of Risk: These findings highlight how contextual risks may influence children’s development via differential effects on mothers’ and fathers’ parenting behaviors.
- Environment Directs Parenting: From an evolutionary perspective, parenting strategies may be more than simply undermined within harsh environments, they may be directed by these aspects (Nettle, 2010) to adaptively shape developmental trajectories to match the environment.
- Neighborhoods as Critical Contexts: The current study reframes development research using evolutionary perspectives and identifies neighborhood as a critical context for young children’s effortful control development at age 3 beyond the effects on parenting.

Results

Figure 1. Mediation Model

Indirect effect, ab = - .026, 95% CI [-.038, -.015]

Model Fit: χ²(41, n = 1745) = 72.445, p < .01; RMSEA = .021 (.013 - .029); CFI = .952.

Notes. Standardized loadings displayed. Nonsignificant paths are indicated by dashed line. P = parcel. Intr = intrusive. NegR = negative regard. EC = effortful control. TP = task persistence. AD = attention to directions. AS = attention span. BM = body movement (reversed).

References


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