

Harshness and Unpredictability in the Family Context: Predicting Young Children's Effortful Control

Shannon M. Warren & Melissa A. Barnett, University of Arizona

Introduction

This study investigates the links between early environmental harshness and unpredictability, and effortful control development in early childhood.

Developmental Research Framed in Life History Theory

Early exposure to harshness & unpredictability:

- serve as cues about the anticipated (adult) environment (Belsky et al., 1991);
- shape developmental trajectories in ways aimed to adaptively match the individual to their environment (Belsky et al., 1991);
- are unique predictors of development (Ellis et al., 2009);
- may have implications for the development of effortful control.

Effortful control:

- the 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 environments requiring the ability to be more present-oriented, competitive, resourceful, and opportunistic (Wenner et al., 2013).

Hypothesis: Early life harshness and unpredictability will uniquely and negatively predict effortful control at age 3.

Methods

Sample Predominantly economically disadvantaged families ($N = 1,969$) from Building Strong Families intervention study; 62% of mothers and 75% of fathers identified as Black/African American.

Time points: Baseline (T0), 15 months (T1), & 36 months (T2)

Harshness (IV)

Economic harshness

Self-reported family household income, T1 & T2

Harsh parenting

7 items from the Conflict Tactics Scale: Parent Child Version Mothers' & fathers' reports about self & new partners, T2

Neighborhood harshness ($\alpha = .82$)

8 interviewer-rated items (e.g., condition of housing), T2

Methods (cont.)

Unpredictability (IV)

Financial unpredictability

Inconsistency in employment: Mother & father reports of (in)consistent employment, T1 & T2

Instances of financial hardship: Mother-reported (e.g., instances of utility shutoff), T1 & T2

Parental unpredictability

Mother-reported coresidential transitions of father and/or new partner across T0, T1, & T2.

Unpredictable daily routines

Mother reports on the frequency of child's regular daily routines (e.g., goes to bed at a regular time), T2 reverse-scored

Child's Effortful Control (DV) ($\alpha = .86$)

Interviewer-rated including task persistence, attention span, body movement, and attention to directions, T2

Analyses Multiple imputation using a chained equation method (Enders, 2010) and hierarchical regression analyses

Table 1. Bivariate correlation matrix.

	1	2	3	4	5	6	7	8	9	10	11
1. Income, T1											
2. Income, T2	.21***										
3. Harsh discipline, mother	.03	.05*									
4. Harsh discipline, father	-.07**	.08**	.24***								
5. Harsh discipline, m partner	-.01	.09***	.16***	.01							
6. Harsh discipline, f partner	.07**	.11***	.05	.19***	.11**						
7. Harsh neighborhood	-.06*	-.11***	-.07**	-.05*	.00	.00					
8. Unpred. Employment	.03	-.09***	.03	.06*	-.03	-.01	.11***				
9. Unpred. Finances	-.01	-.01	.11***	.06*	.07**	.09**	.03	.10***			
10. Unpred. Parent	-.10***	-.11***	.03**	-.11***	.19***	.02	.04	-.04	.03		
11. Unpred. daily routines	.00	-.03	.06	.01	-.02	-.04	.01	-.01	-.02	.00	
12. Effortful control (DV)	-.01	.01	.01	-.01	.01	.01	-.12***	.01	.01	.04	-.04

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. m = mother's, f = father's, T1 = 15 months, T2 = 36 months.

Results

Table 2. Summary of Step 3 Hierarchical Regression Results

	b	SE
Constant	11.77*	0.52
Control		
Child sex	1.40***	0.14
White, Mother ^a	- 0.55*	0.30
White, Father ^a	- 0.11	0.30
Other race, Mother ^a	- 0.16	0.40
Other race, Father ^a	- 0.28	0.42
Program site	0.10**	0.04
Intervention	0.05	0.14
Harshness		
Income (T1)	- 0.00	0.00
Income (T2)	0.00	0.00
Harsh discipline, mother	0.03	0.05
Harsh discipline, father	0.02	0.05
Harsh discipline, m partner	- 0.11	0.29
Harsh discipline, f partner	0.14	0.24
Dummy variable, m partner ^b	- 0.05**	0.23
Dummy variable, f partner ^b	0.17	0.23
Neighborhood harshness	- 0.22***	0.04
Unpredictability		
Unpred. employment	0.07	0.07
Unpred. parent	0.02	0.09
Unpred. finances	0.02	0.06
Unpred. daily routines	- 0.10*	0.05

Notes. $R^2 = .07$. * $p < .05$. ** $p < .01$. *** $p < .001$. m = mother's, f = father's, T1 = 15 months, T2 = 36 months. ^aIn comparison to reference group, African American/Black. ^bDummy variables were created to handle unbalanced data.

Conclusions and Implications

- This study included mother and father self-reports, mother and father reports about new partners, and interviewer-rated measures. This multi-method and multi-reporter approach advances research on child development, which often only includes mother reports, and rarely includes new partner parenting behaviors.
- Based on study results, cues of harshness that come from neighborhood aspects may have a role in shaping the development of effortful control.
- Explicitly linking early harshness and unpredictability in the family context to the development of effortful control could facilitate a more nuanced understanding of early environmental effects on development.

Acknowledgements

The authors acknowledge funding from the Frances McClelland Institute for Children, Youth, and Families.

A PDF version of this academic poster is available at: <http://mcclellandinstitute.arizona.edu/posters>

