

Supplementary Material

Observed negative discipline

At T1, parental disciplinary behaviors were observed in a 3-minute negative discipline task requiring caregivers to prohibit their children from playing a desired game on an iPad. According to parents' reports, all children had regular access to personal electronic devices at home, and none of them were familiar with the game in the current study. Two experimenters greeted the parent and the child in the laboratory. While one experimenter engaged with the child to establish rapport, the other experimenter gave instructions to the parent in an adjacent room without the child's presence. Parents were told that the purpose of this task was to observe how parent and child interact and were instructed to prevent the child from touching the iPad, as they would in an everyday household context. Parents and children were then seated in an observation room equipped with a child-sized table and two chairs. An experimenter introduced the iPad game to the child. She then told the child that she needed to leave the room for a short time and asked the child to wait for her to come back so that they could start playing the game together. She set up the iPad on the table with the game playing on its own and asked the child not to touch the iPad before leaving the room. The parent and the child were left in the room for three minutes. Their behaviors and conversations during this period could be observed through a one-way mirror and were simultaneously video-recorded for later coding. After three minutes, the experimenter returned and started playing with the child as promised.

To code the recorded parental negative discipline behaviors, each 3-minute video was divided into three 1-minute episodes. The behaviors were coded on a macroscopic scale using a coding scheme from Lengua et al. (2007). Behaviors in each 1-minute episode were assigned a global score from 1 to 5 according to the coding manual. A score of 1 indicated that the parent

failed to set necessary and appropriate limits, with highly inconsistent behaviors and unclear commands. Conversely, a score of 5 indicated that the caregiver clearly established, maintained, and followed through on limits that were easy for the child to understand. The reversed average score across the 3 episodes was taken as an index of ineffective negative discipline behavior. The first author of the current paper trained two undergraduate coders according to the coding manual and using practice videos. The team met once a week for 4 weeks to identify and discuss discrepancies until reaching an acceptable interrater reliability. The final intraclass correlation (ICC) based on 20 randomly selected videos between the two independent coders was acceptable at .856. Discrepancies were resolved through discussion.

Result

The observed negative discipline was not correlated with parent-reported negative discipline, nor with parental neuroticism, as shown in Table S1. A visual inspection of the data revealed that the observed discipline was highly skewed, with most of the data lying in the left tail of the distribution.

Table S1. Descriptive statistics and bivariate correlations among the main variables, including observed negative discipline.

	1	2	3	4	5	6
1.T1 Neuroticism	--					
2.T1 Perspective-taking	-.254**	--				
3.T1 Negative discipline (rep)	.422 **	-.326**	--			
4.T1 Negative discipline (obs)	-.062	-.080	.051	--		
5.T2 Household chaos	.276**	-.363**	.392**	.008	--	
6.T2 Negative discipline (rep)	.261*	-.120	.549**	-.058	.563**	--

7. Age	.125	.133	.012	-.086	-.087	-.012
8. Gender	-.065	.007	-.110	-.126	-.188	-.099
9. SES	-.159	.214*	-.123	.038	-.355**	-.254*
M (SD)	2.90 (.91)	3.75 (.49)	2.62 (.49)	1.77 (.83)	2.37 (.66)	2.66 (.46)
α / r / ICC	.52	.72	.71	.86	.65	.71
Skewness	.18	-.41	.08	.14	.36	.34
Kurtosis	-.74	.82	.88	2.89	.04	-.14

Note. rep = Parent self-report; obs = laboratory observation.

Discussion

This result echoed with McCabe’s (2014) meta-analysis showing the association between parental neuroticism and parenting behavior demonstrated a larger effect size when parenting was measured through self-report rather than observed. The short laboratory observation in the current study might not be able to adequately capture the full extent of day-to-day parenting activities, especially negative parenting behaviors. Moreover, caregivers were aware that they were being video-recorded in the laboratory context, which most likely would influence their disciplinary behavior. The weak association between self-reported and observed negative discipline calls for caution in interpreting results obtained from different assessments of parenting behaviors. Many studies have examined the consistency between self-reported and observed parenting measures, either failing to find an association between the two or otherwise only finding a weak link (Bornstein et al., 2001). Given that self-report and observation methods have their own advantages and disadvantages, they are complementary to each other in their explanations of parenting behaviors. Although the structured observation in the laboratory

ensured consistency, it may not reflect real-world behaviors (Repetti et al., 2015). Future studies are warranted to observe parental discipline behaviors in more naturalistic settings for greater ecological validity and generalizability. Furthermore, a qualitative approach could potentially provide complementary insights into parental discipline behaviors, such as the tone of voice, facial expressions, or eye contact during parent-child interaction.

Reference

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