



Published in final edited form as:

*Fam Relat.* 2012 April 1; 61(2): 224–236. doi:10.1111/j.1741-3729.2011.00700.x.

## Forms of Spanking and Children’s Externalizing Behaviors

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### Abstract

Research suggests that corporal punishment is related to higher levels of child externalizing behavior, but there has been controversy regarding whether infrequent, mild spanking predicts child externalizing or whether more severe and frequent forms of corporal punishment account for the link. Mothers rated the frequency with which they spanked and whether they spanked with a hand or object when their child was 6, 7, and 8 years old. Mothers and teachers rated children’s externalizing behaviors at each age. Analyses of covariance revealed higher levels of mother-reported externalizing behavior for children who experienced harsh spanking. Structural equation models for children who experienced no spanking or mild spanking only revealed that spanking was related to concurrent and prior, but not subsequent, externalizing. Mild spanking in one year was a risk factor for harsh spanking in the next year. Findings are discussed in the context of efforts to promote children’s rights to protection.

### Keywords

child aggression; corporal punishment; externalizing behavior; parental discipline; spanking

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In the developmental psychopathology literature, the term “externalizing behavior” generally refers to specific noncompliant, physically aggressive, defiant, and delinquent behaviors that are deemed inappropriate by parents or other authority figures (Dodge, Coie, & Lynam, 2006). Children whose externalizing behaviors are more frequent or severe than those of their same-aged peers may be diagnosed with externalizing disorders such as Oppositional Defiant Disorder or Conduct Disorder (Loeber, Burke, Lahey, Winters, & Zera, 2000). The etiology of these externalizing behaviors or disorders has been the focus of an enormous body of research. Numerous factors, including genetic influences (e.g., Arseneault et al., 2003; Rhee & Waldman, 2002) and nongenetic influences, ranging from peers (e.g., Harris, 1998) to environmental toxins such as lead (e.g., Dietrich, Ris, Succop, Berger, & Bornschein, 2001), may contribute to the development of externalizing behaviors.

Parents are likely to play a major role, too, and they are often viewed as the prime socializing agents for their children (e.g., Maccoby, 1992).

Parents engage in a wide variety of behaviors that may be associated with the prevention or reduction of externalizing in their children, and parents utilize specific strategies to discipline their children or to punish particular acts of child externalizing. In fact, parents' failure to provide appropriate discipline for their children is frequently perceived, both by researchers and the general public, as one of the primary causal mechanisms in the development of child externalizing problems (e.g., Barkley, 2000). In describing how to prevent or reduce child externalizing behaviors Patterson (1982, p. 111) stated, "If I were allowed to select only one concept to use in training parents of antisocial children, I would teach them how to punish more effectively" and by Wells (1997, p. 338) who stated that "parents of antisocial children simply cannot, or do not, punish well."

Prevention and intervention programs have targeted reducing parents' use of corporal punishment as a mechanism through which to reduce children's externalizing behaviors. This body of research includes a number of treatment outcome studies (e.g., Beauchaine, Webster-Stratton, & Reid, 2005), prevention studies with high-risk groups (e.g., Martinez & Forgatch, 2001), and longitudinal observational studies (e.g., Galambos, Barker, & Almeida, 2003). For example, Martinez and Forgatch (2001) randomly assigned recently divorced mothers of boys in first through third grade to either a prevention intervention or a control group. Mothers in the intervention group were taught to decrease coercive cycles by using noncorporal punishment (e.g., time-out, privilege removal), to encourage prosocial behavior through contingent positive reinforcement, and to use positive parenting strategies (e.g., monitoring) with their sons. Decreases in coercive discipline and increases in positive parenting independently predicted decreases over time in child externalizing in the intervention group.

## Corporal Punishment

Corporal punishment has received a great deal of attention from researchers attempting to understand its relation to children's externalizing behaviors. Straus (1994) has provided a concise definition: "Corporal punishment is the use of physical force with the intention of causing a child to experience pain, but not injury, for the purpose of correction or control of the child's behavior" (p. 4). This definition underscores two important characteristics of corporal punishment. First, corporal punishment is intended to cause physical pain to the body. Second, corporal punishment should be distinguished from acts of physical abuse (e.g., burning, stabbing, choking) that cause more than transient injury (e.g., redness of the skin) to the body. Spanking on the buttocks, slapping the hands or face, and grabbing or shoving a child with more intensity than is required to move the child are all common forms of corporal punishment. Even harsher forms of corporal punishment such as hitting a child with an object (e.g., belt, wooden spoon, paddle, or switch) are quite common (e.g., Baumrind, Larzelere, & Cowan, 2002; Knutson & Selner, 1994; Straus & Stewart, 1999).

In the United States, the majority of parents support the use of corporal punishment (e.g., Graziano & Namaste, 1990; Schenck, Lyman, & Bodin, 2000), with 77% of American men and 65% of American women in a nationally representative sample interviewed in 2008 agreeing that sometimes a child needs a "good, hard spanking" (Child Trends, 2009). Using data from a nationally representative sample of Americans, Straus and Paschall (2009) reported that 93% of parents had hit (either with or without an object) their two- to four-year-old child within a two-week period, and 58% of parents had hit their five- to nine-year-old child within a two-week period. The use of corporal punishment and endorsement of its use remain prevalent in the United States.

## Relations between Corporal Punishment and Child Externalizing

Gershoff (2002) conducted a meta-analysis of the relation between parental use of corporal punishment and child outcomes. She included all empirical investigations of corporal punishment published since 1938, excluding studies that combined corporal punishment with physical abuse. Importantly, she did not exclude studies in which spanking with objects was included as a form of corporal punishment. Of the 88 included studies, 74% were published after 1980. Gershoff (2002) found small to medium weighted effect sizes for child moral internalization, child aggression, child delinquent and antisocial behavior, and adult criminal and antisocial behavior. She reported a medium effect size for adult aggression, and a large effect size for immediate compliance. Corporal punishment was related to more immediate compliance but was related to more negative child outcomes for all other variables considered. In a separate meta-analysis, Paolucci and Violato (2004) found that individuals who had been corporally punished were at greater risk of affective and behavioral problems (with small effect sizes), but there was no increased risk of cognitive problems. One study found corporal punishment to be related to higher levels of anxiety and aggression in six countries, although the strength of the relation was moderated by the normativeness of corporal punishment within a given country, with stronger associations between corporal punishment and poor adjustment in those countries in which the use of corporal punishment was not normative (Lansford et al., 2005).

In response to Gershoff's (2002) meta-analysis, some researchers (e.g., Baumrind et al., 2002) have argued that "ordinary" (p. 580) corporal punishment is not associated with increased child externalizing if such punishment is infrequent and not severe (i.e., only spansks on the presumably clothed buttocks or slaps on the hand with an open hand). Baumrind (1997) reported that spanking of preschool children in her predominantly European American, highly educated, high SES sample was not predictive of social competence, noting that virtually all of the parents in her study spanked their children, but at a frequency of less than once a week. Researchers who have manipulated use of spanking as a back-up to time-out (e.g., Heffer & Kelley, 1987; Roberts & Powers, 1990) have also rigorously defined spanking as 1-4 swats with an open hand on a child's buttocks. Larzelere (2000) concluded from his qualitative review that non-abusive spanking of 2- to 6-year-old children could have beneficial effects when used to backup reasoning or time-outs. In a meta-analysis of 26 studies, Larzelere and Kuhn (2005) concluded that spanking in certain circumstances was more effective than 10 of 13 alternate discipline practices at reducing child noncompliance and antisocial behavior, and only physical discipline that was overly severe or used as the predominant discipline method resulted in worse outcomes than other discipline practices.

Nevertheless, Baumrind and her colleagues' (2002) definition of "ordinary" spanking and the research definitions previously mentioned may not be reflective of how many parents use corporal punishment. Survey research suggests that use of an object (e.g., belt, paddle, switch) for spanking is quite frequent in the United States. Straus and Stewart (1999) found that 18% of parents of 2- to 4-year-olds and 28% of parents of 5- to 12- year-olds used an object to hit their child on the buttocks during the previous year. Knutson and Selner (1994) found that 27% of women and 34% of men reported that their parents had hit them with objects. Respondents in this study were college freshman, and 95% of the students were from middle to upper income families. Lower SES parents have been found to use corporal punishment more frequently than higher SES parents (Flynn, 1994), but the Knutson and Selner (1994) study suggests that use of objects for the administration of corporal punishment may be quite common, even among families with high SES.

Virtually all studies examining the relation between corporal punishment and child externalizing simply ask parents about their frequency of spanking, allowing parents to define corporal punishment or spanking themselves. Parents may rely on their own childhood experiences with corporal punishment or consult popular literature (e.g., Lessin, 2002) about what constitutes appropriate and inappropriate spankings. In all likelihood, the definition of spanking may differ from one parent to the next and between parents and researchers. Variables other than frequency may be just as important to assess. Trickett and Kuczynski (1986), for example, reported no significant differences between abusive and nonabusive parents in the frequency of spanking; but they found that 40% of abusive parents and 0% of nonabusive parents used forms of corporal punishment such as striking with an object, striking the face, or administering pants-down, bare-skin spankings.

Several previous studies have examined links between corporal punishment and externalizing behavior in the Child Development Project, the sample used in the present study. This previous work has demonstrated that more frequent use of corporal punishment is related to higher subsequent levels of externalizing behavior, even after controlling for several sociodemographic confounds (Strassberg, Dodge, Pettit, & Bates, 1994; Weiss, Dodge, Bates, & Pettit, 1992). Some studies have reported that these links hold for European American but not African American families (Deater-Deckard, Dodge, Bates, & Pettit, 1996; Lansford, Deater-Deckard, Dodge, Bates, & Pettit, 2004). Recently, reciprocal relations have been found between corporal punishment and externalizing behavior, with corporal punishment in one year predicting higher levels of externalizing behavior in the next, and higher levels of externalizing behavior in one year predicting higher levels of corporal punishment in the next (Lansford et al., 2011). This previous research using data from the Child Development Project has operationalized corporal punishment in multifaceted composite scores that include spanking with a hand and spanking with an object, and sometimes other aspects of corporal punishment (e.g., grabbing or shaking). These previous studies did not address questions regarding how different forms of corporal punishment may be related to externalizing problems in different ways. Lansford, Criss, Dodge, Shaw, Pettit, and Bates (2009) examined developmental antecedents and outcomes associated with spanking with an object versus spanking with a hand, but these analyses did not clearly differentiate groups of children who were not spanked with objects and who were spanked with a hand less than once a week from children who experienced more harsh and frequent spanking. The present study extends previous work with this sample by clearly distinguishing among children who experienced mild and infrequent spanking only from other children. The relation between specific forms of corporal punishment (e.g., spanking with a hand versus with an object) and child externalizing may be different, and these aspects of the relation between corporal punishment and child externalizing are the focus of this investigation.

## The Current Study

The current study examines mothers' use of different forms of spanking. First, we compared externalizing behaviors of children who had experienced no spanking, mild spanking, or harsh spanking in the previous year, controlling for prior externalizing behavior. We hypothesized a linear relation between spanking and subsequent externalizing, with the lowest levels of externalizing for children who had not been spanked and the highest levels of externalizing for children who had experienced harsh spanking. Second, among the children who had experienced no spanking or mild spanking only we examined reciprocal links among externalizing behavior and mild spanking at ages 6, 7, and 8. We hypothesized that we would find evidence that mild spanking in one year predicted externalizing behavior in the next year and that externalizing in one year predicted mild spanking in the next year, even after taking into account stability in both mild spanking and externalizing. Third, we

examined whether mild spanking in one year conferred risk for harsh spanking in the next year. We hypothesized that mild spanking would escalate into future harsh spanking.

## Method

### Participants

Participants for this study were recruited for the Child Development Project (CDP; Dodge, Bates, & Pettit, 1990), a multi-site, longitudinal study that has investigated the development of a wide variety of child behaviors and outcomes, focusing especially on child externalizing behavior. Participants were recruited from Nashville and Knoxville, TN and Bloomington, IN during the summer prior to or early fall of kindergarten in 1987 and 1988. Parents were randomly approached and asked to participate in the CDP at the time of their child's kindergarten preregistration. Approximately 75% of parents thus approached agreed to participate in the study, for a total of 585 families. Of these families, 97 identified themselves as being African American, 477 identified themselves as being European American, and 11 families identified themselves as being of other ethnic origin.

Mothers, or female heads of household, were interviewed at the initial assessment to determine family demographic characteristics. Across the entire sample, 48% of the target children were female, 26% of families were headed by single mothers, and the mean age of mothers at the time of the initial assessment was 31.7 years ( $SD = 5.12$ ). Family socioeconomic status (i.e., SES,  $M = 39.59$ ,  $SD = 13.96$ ) was determined based on the Hollingshead's (1979) Four-Factor Index (i.e., mother's years of education, mother's occupation, father's years of education, and father's occupation). Mothers' data were double-weighted (included twice) in the scoring algorithm for single-mother families. None of the children lived in single-father households at the time of the initial assessment.

### Procedure

During the summer preceding children's entry into first, second, and third grade (when children were 6, 7, and 8 years old in 1988-1990 for cohort 1 and 1989-1991 for cohort 2), mothers annually completed questionnaires sent through the mail. During the spring of each school year, teachers completed mailed questionnaires about their perceptions of target children's externalizing behaviors. Ninety-two percent of the original 585 families participated when children were 6 ( $n = 537$ ), 88% of the original 585 participated when children were 7 ( $n = 517$ ), and 85% of the original 585 participated when children were 8 ( $n = 498$ ). The 498 children for whom data were available at age 8 did not differ from the 87 children for whom data were not available at age 8 on ethnicity,  $\chi^2(2) = 1.43$ , single-mother status,  $\chi^2(1) = .02$ , child gender,  $\chi^2(1) = .08$ , or family SES,  $t(567) = -1.36$ . Participants signed statements of informed consent before completing the measures. In each year, mothers were paid \$20, plus an additional \$10 if they were part of a subset of families that completed a home observation component of the study. Teachers were paid \$5 for completing a rating of the child's behavior.

### Measures

**Spanking**—When children were ages 6, 7, and 8, mothers annually rated the frequency with which they spanked the child with their hand and spanked their child with an object during the past year on a scale from 0 to 4, anchored with the following descriptors: 0 = never (23%, 26%, and 36% never spanked with their hand at ages 6, 7, and 8, respectively; 64%, 65%, and 66% never spanked with an object at ages 6, 7, and 8, respectively), 1 = less than once a month (37%, 44%, and 41% spanked with their hand less than once a month at ages 6, 7, and 8, respectively; 19%, 19%, and 19% spanked with an object less than once a month at ages 6, 7, and 8, respectively), 2 = about once a month (20%, 18%, and 13%

spanked with their hand about once a month at ages 6, 7, and 8, respectively; 8%, 10%, and 9% spanked with an object about once a month at ages 6, 7, and 8, respectively), 3 = about once a week (18%, 11%, and 9% spanked with their hand about once a week at ages 6, 7, and 8, respectively; 8%, 6%, and 5% spanked with an object about once a week at ages 6, 7, and 8, respectively), and 4 = about every day (2%, 1%, and 1% spanked with their hand about every day at ages 6, 7, and 8, respectively; 1%, <1%, and 1% spanked with an object about every day at ages 6, 7, and 8, respectively).

**Externalizing behavior**—Mothers and teachers, respectively, completed the Child Behavior Checklist (CBCL; Achenbach & Edelbrock, 1983) and Teacher Report Form (TRF; Achenbach & Edelbrock, 1986) annually when the children were ages 6, 7, and 8. The Externalizing Behavior Problems scale on the CBCL and TRF consists of 33 and 34 items, respectively (e.g., argues a lot, gets in many fights, lies or cheats). Mothers and teachers rated each item as 0 = not true of child, 1 = somewhat or sometimes true of child, or 2 = very true or often true of child. The items were summed to form an externalizing scale in each year, separately for mother- and teacher-report (alphas were above .90 for all years and both reporters).

### Analysis Plan

Baumrind et al. (2002) have hypothesized that “ordinary” physical punishment (i.e., spanking only with an open hand at a frequency of less than once a week) is not associated with increases in child externalizing. To test this hypothesis, we conducted two sets of analyses. First, we conducted analyses of covariance (ANCOVAs) to compare externalizing behaviors of children who had experienced no spanking, mild spanking (with a hand, less than once a month or about once a month in the last year), or harsh spanking, controlling for prior externalizing. Second, for the children who had experienced no spanking or mild spanking only, we used structural equation models to examine the reciprocal relations between mild spanking and externalizing behavior from age 6 to age 8. In these analyses, missing data were handled using full information maximum likelihood estimation (FIML), which results in unbiased parameter estimates and appropriate standard errors when data are missing at random (MAR). FIML estimates are generally superior to those obtained with listwise deletion or other ad hoc methods, even when the MAR assumption is not fully met (Schafer & Graham, 2002). We conducted a third set of analyses to test the hypothesis that mild spanking in one year would confer risk for harsh spanking in the next year.

### Results

We first examined differences in externalizing for children who had never been spanked in the last year, who had been spanked with a hand only and less than once a week, and who had been spanked with a hand once a week or more frequently or with an object. ANCOVAs controlling for externalizing in the year prior to the measure of spanking were used to predict externalizing in the year after the measure of spanking. The results of the 2-df omnibus tests are summarized in Table 1. As shown, these analyses were conducted separately for mothers’ and teachers’ reports of externalizing, and the analyses for each reporter were conducted three times to vary the years of measurement of each of the constructs. The pattern of findings was consistent across years. There were no significant differences among the three spanking groups on teacher-reported externalizing. For mother-reported externalizing, there were significant differences between the harsh spanking group and the other two groups but no significant differences between the no spanking and mild spanking only group. These group differences remained significant after controlling for child gender, ethnicity, socioeconomic status, family stress, mothers’ marital status, and mothers’ age.

We tested whether the hypothesized linear contrasts were supported to a greater extent than quadratic contrasts, following the procedures described by Rosenthal and Rosnow (1985). In the resulting 1-df tests, the quadratic contrast was nonsignificant for all six models shown in Table 1. The linear contrast was significant for all three mother-reported externalizing models and for the teacher-reported externalizing in relation to age 8 spanking model. These analyses provided support for the hypothesized linear relation between spanking and child externalizing.

We then restricted the sample to children who were never spanked with an object at ages 6, 7, and 8 and who were spanked with a hand less frequently than once a week to understand the longitudinal links between mild spanking (compared to no spanking) and externalizing more clearly. This restriction resulted in a sample of 258 families. Compared to the 327 children of the original 585 who did not meet these criteria for experiencing no spanking or mild spanking only, the 258 who did meet these criteria were more likely to be European American than African American,  $\chi^2(2) = 36.03, p < .001$ , were more likely to have married than single mothers,  $\chi^2(1) = 6.36, p < .05$ , and were from higher SES families,  $t(567) = -6.22, p < .001$ , but did not differ on child gender,  $\chi^2(1) = .26, p > .10$ .

In this sample of children who had experienced no spanking or mild spanking only, we analyzed structural equation models that included autoregressive and cross-lagged paths for age 6, age 7, and age 8 mild spanking and age 6, age 7, and age 8 externalizing (see Figure 1). Bivariate correlations among the variables are presented in Table 2. We initially tested models in which paths were constrained such that the path between two constructs was constrained to be equal to the path between the same two constructs at the next time interval (e.g., path between age 6 and age 7 externalizing constrained to be equal to the path between age 7 and age 8 externalizing). With these constraints, the model with teacher-reported externalizing fit the data well,  $\chi^2(8) = 11.43, ns$ , CFI = .99, RMSEA = .04, and model fit was not significantly improved by freeing any of the constraints; thus the path coefficients reported in Figure 1 are from the fully constrained model for teacher reports (before the slash in the figure). However, the fit of the model with mother-reported externalizing was improved significantly,  $\Delta\chi^2(6) = 23.62, p < .001$ , by freeing the cross-time constraints on the autoregressive paths for mother-reported externalizing. After allowing the externalizing autoregressive paths to vary across time, the model with mother-reported externalizing fit the data well,  $\chi^2(7) = 7.58, ns$ , CFI = .99, RMSEA = .02.

The autoregressive paths were strong and significant for both mild spanking and externalizing (both teacher and mother report). There were no significant paths between mild spanking and teacher-reported externalizing for any of the years. There were significant concurrent links between mild spanking and externalizing within a given time point and significant paths between mother-reported externalizing in one year and mild spanking in the next year, but there were no significant paths between mild spanking in one year and mother-reported externalizing in the next year. These results were consistent regardless of whether the sample included just European American families versus all families regardless of ethnicity. The results also were substantively the same after controlling for child gender, socioeconomic status, family stress, mothers' marital status, and mothers' age. Therefore, the results in Figure 1 include families of all ethnicities and are presented without controls.

To examine the possibility that use of mild spanking would escalate into the use of harsher spanking, we conducted chi-square analyses to compare spanking (none, mild, or harsh) in one year with spanking in the next (none, mild, or harsh). We found support for the hypothesis that mild spanking in one year would be a risk factor for harsh spanking in the next. Of the mothers who used mild spanking at age 6, 17% used harsh spanking at age 7, compared to 12% of mothers who used no spanking at age 6,  $\chi^2(4, n = 452) = 196.21, p < .$

001. Likewise, of the mothers who used mild spanking at age 7, 15% used harsh spanking at age 8, compared to 10% of mothers who used no spanking at age 7,  $\chi^2(4, n = 440) = 212.64$ ,  $p < .001$ . Thus, compared to no spanking, mild spanking conferred a 50% increase in risk of subsequent harsh spanking.

## Discussion

A complicated issue raised by recent meta-analyses is whether the robust associations that have been reported between corporal punishment and children's externalizing behavior (see Gershoff, 2002) are generalizable to both harsh and mild spanking, or whether these associations are accounted for primarily by harsher forms of spanking. For example, Baumrind et al. (2002) have argued that spanking with objects is more akin to physical abuse, and that inclusion of this harsh form of spanking accounts for the positive relation between corporal punishment and externalizing that has been reported in the literature. Baumrind et al. hypothesized that "ordinary" physical punishment (i.e., spanking with an open hand at a frequency of less than once a week) would not be associated with increases in child externalizing. To test this hypothesis, the current study took two approaches. First, we used a three-wave design to examine differences in externalizing behavior among children who had not been spanked, who had experienced mild spanking (with a hand less than once a week), or who had experienced harsh spanking (with an object or with a hand once a week or more), controlling for prior externalizing. Children who had experienced harsh spanking had significantly higher levels of mother-reported externalizing than did children who had experienced no spanking or mild spanking, but children who had experienced mild spanking did not differ in mother-reported externalizing from children who had experienced no spanking, providing some support for Baumrind's claim. Second, we examined the relation between mild spanking and externalizing in a subset of families in which children were never spanked with objects from age 6 to age 8. In addition, these children were either never spanked with a hand or were spanked at a mean rate of less than once a week across the three assessment years. We found that mild spanking was related to concurrent and prior mother-reported externalizing but not to subsequent externalizing. Results from this study support the general findings from a vast body of research that there is a positive relation between corporal punishment and child externalizing (e.g., Gershoff, 2002), including findings from longitudinal work that controlled for Time 1 externalizing and demonstrated increases by Time 2 among children who are corporally punished (Straus, Sugarman, & Giles-Sims, 1997). However, as argued by Baumrind et al. (2002), the findings also suggest that the prospective links may be driven largely by harsher forms of spanking.

When teacher-reported externalizing rather than mother-reported externalizing was examined, the findings did not suggest links between mild or harsh spanking and child externalizing behaviors. Mothers' and teachers' reports of child externalizing were correlated significantly in each year ( $r = .29, .33$ , and  $.36$  at child age 6, 7, and 8, respectively, all  $p < .001$ ), and would be interpreted as medium-sized effects in Cohen's (1988) terms. These correlations between mothers' and teachers' reports are comparable to others that have been reported in the literature. Notably, Achenbach and Rescorla (2001) reported an average correlation of  $.36$  between mothers' reports on the CBCL and teachers' reports on the TRF externalizing scales, the same measures used in the current study. This moderate (rather than high) degree of consistency across informants might be expected given that mothers and teachers are reporting about children's behaviors in different contexts (at home versus in school), and mothers and teachers have different reference points (e.g., teachers likely implicitly compare a given child's behavior to the behavior of other students in the child's class). Correlations between mothers' and fathers' reports of children's externalizing problems are generally higher than correlations between mothers' and teachers' reports (Achenbach & Rescorla, 2001). Neither parents' nor teachers' reports



should be interpreted as being more accurate or “true” than the other (Thomas, Forehand, Armistead, Wierson, & Fauber, 1990). Other research also has found stronger links between spanking and mothers’ reports of children’s externalizing problems than teachers’ reports of children’s externalizing (e.g., Larzelere & Kuhn, 2005), perhaps in part because mothers are more likely to spank their children if they perceive the children as having externalizing problems. In the present study, two additional factors could have accounted for the differences in findings depending on whether mothers or teachers reported on child externalizing. First, mothers were the sole reporters of spanking, introducing same source bias when their reports of spanking were examined in relation to mother-reported externalizing. Second, a different teacher reported on child externalizing in each year, introducing an additional source of variability in the teacher reports of externalizing than in the mother reports.

Interestingly, the majority of mothers who reported spanking their children did not fit the criteria for mild spanking suggested by Baumrind et al. (2002). Instead, when their children were 6 and 8 years old, more than half of mothers who spanked used objects or, if they spanked with their hand, did so at a frequency of once a week or more. One risk of using any form of corporal punishment is that it will escalate into harsher forms in coercive cycles between parents and children (Patterson, Reid, & Dishion, 1992). Indeed, our analyses revealed that compared to no spanking, mild spanking in a given year conferred a 50% increase in risk of harsh spanking in the next year.

During this period of middle childhood when even researchers who endorse the use of spanking with toddlers become more concerned with possibly negative effects of corporal punishment (Larzelere, 2000), most mothers continued to spank their children. When children were 6 and 7 years old, fewer than 20 percent of mothers reported that they had not spanked their child in the last year; by age 8, fewer than 30 percent of mothers reported that they had not spanked their child in the last year. Thus, the majority of mothers continued to spank their children, and the majority of those who continued to spank used objects.

Behavioral genetics studies generally find that a proportion of the variance in externalizing behaviors in adults and children can be accounted for by genetic factors (e.g., Arseneault et al., 2003; Hicks, Krueger, Iacono, McGue, & Patrick, 2004; Moffitt, 2005; Rhee & Waldman, 2002). However, the present study, like most of the research on child externalizing, did not control for the effects of genetic influences on child externalizing or for genetic influences on parental spanking. Moffitt (2005) argues that research on the effects of “bad parenting” (p. 535) on antisocial behavior has rarely controlled for genetic influences on children’s aggression, genetic influences on “bad parenting” itself, a passive correlation between “bad parenting” and children’s aggression, or an evocative correlation between children’s aggression and “bad parenting.” Even studies using genetically informative designs have found that parenting matters (Burt, McGue, Krueger, & Iacono, 2005, 2007; Stams, Juffer, & van IJzendoorn, 2002). Future research will benefit from attempts to understand more fully how genetic and parental influences interact to shape children’s externalizing behavior.

As children increase their levels of externalizing behaviors, parents respond by increasing the frequency of their spanking, resulting in parent-child reciprocal transactions over time (e.g., Anderson, Lytton, & Romney, 1986; Bell, 1979; Lansford et al., 2011; Lytton, 1990). In our cross-lagged analyses, children’s externalizing behavior at age 6 predicted mothers’ use of mild spanking at age 7, and children’s externalizing at age 7 predicted mothers’ use of mild spanking at age 8, even after taking into account the stability of both externalizing and mild spanking over time. This finding adds to the growing literature on reciprocal models of socialization (Pettit & Arsiwalla, 2008). In addition, the links between mild spanking in one

year and externalizing in the next year were not significant. Although caution is always warranted in interpreting null effects, this finding suggests that mild spanking is not decreasing children's subsequent externalizing behavior. Most parents who spank their children probably intend for the spanking to decrease future behavior problems; therefore, our findings suggest that spanking is most likely not having its main intended effect of decreasing subsequent externalizing.

### Limitations and Future Directions

There were a number of limitations in this study. We examined child gender, ethnicity, family SES, family stress, mothers' marital status, and mothers' age as potential covariates, but the findings did not change substantively when these variables were included in the analyses. It is possible that other unexamined variables might have accounted for the pattern of findings. For example, although child externalizing is likely to be associated with spanking by both mothers and fathers, only mothers' spanking was assessed in this study. Future research would benefit from including fathers' reports of the child's experience of spanking as well as fathers' reports of children's externalizing behaviors to help shed light on whether links between spanking and children's externalizing generalize to different informants reporting about the child's behavior at home but less so to school, versus being more idiosyncratic to mothers' reports of the child's externalizing. The spanking questions used a one-year timeframe, which has the possibility to introduce recall or recency biases if mothers did not recall accurately how frequently they spanked through the whole year and relied on a more recent time period. Furthermore, mothers were the only source of information about their spanking, and their reports might represent underreports of how much spanking children actually experienced, both because mothers may have underreported their own spanking due to social desirability concerns and because mothers may not have been aware of times when children were spanked by fathers or others.

Although the focus of this study was on examining relations between different forms of spanking and externalizing, different forms of spanking may have different effects on other behavioral outcomes as well. For example, severe forms of spanking (e.g., with objects) and less severe forms of spanking may have a different relation with anxiety or depression in childhood. Severe corporal punishment may be more of a risk factor than less severe forms for adult psychopathology. In addition, little is known about how severe versus less severe forms of corporal punishment may affect the parent-child relationship or how they may affect other relationships.

Finally, although questions still remain about the relation between corporal punishment and child externalizing, parents, policymakers, and practitioners who work with families are increasingly calling into question whether corporal punishment should ever be used, regardless of how it is related to children's externalizing behavior. In the approximately 20 years since the spanking data in this study were collected, societal attitudes about spanking have been changing. During the same time period data for this study were being collected, the Convention on the Rights of the Child (CRC) was introduced and ratified by all except two members of the United Nations (Somalia, which has announced plans to ratify the CRC, and the United States; United Nations, 1989). The CRC asserts children's right to protection from all forms of harsh treatment (including corporal punishment) and has become a major organizing framework in discussions regarding spanking of children (Jones & Welch, 2010; Pinheiro, 2006; United Nations, 1989; [www.endcorporalpunishment.org](http://www.endcorporalpunishment.org)). Furthermore, the CRC has spawned an international study of violence against children (Pinheiro, 2006), as well as many intervention efforts aimed at reducing or eliminating parents' use of any forms of corporal punishment (see Lansford & Bornstein, 2007). Thus, spanking has increasingly become an ethical and moral issue, not just a scientific one.

Despite these changes in attitudes about spanking in the global community, there is less evidence that American parents' rates of spanking are changing. In interpreting the findings from the present study, we acknowledge the potential limitation of drawing on data that may be dated, given the study's reliance on data collected from mothers of children who started kindergarten in 1987 or 1988. Nevertheless, spanking clearly remains a widespread practice among American parents today. For example, in a nationally representative sample of 11,044 children who started kindergarten in 1998 (10-11 years after the children in the present study started kindergarten), 80% of mothers reported that the kindergarten children had been spanked at some point (Gershoff, Lansford, Sexton, Davis-Kean, & Sameroff, in press), a number that closely matches the proportion of mothers who reported spanking in the current study. In data collected from 2008-2009, 37% of American mothers reported that their 7- to 10-year-old children had been corporally punished in the last month alone (Lansford et al., in press).

## Conclusions

In summary, this study suggests that children who experienced harsh spanking (with objects or at a frequency of once a week or more with a hand) had significantly higher levels of mother-reported externalizing behavior at ages 6, 7, and 8 than did children who experienced no spanking or mild spanking at those ages, even controlling for prior externalizing behavior and other possible confounds. Among the children who experienced mild spanking or no spanking, mild spanking was related to concurrent and prior mother-reported externalizing. Compared to children who were not spanked, children who experienced mild spanking in one year were at increased risk of experiencing harsh spanking in the next year. These findings underscore the importance of distinguishing among different forms of corporal punishment. The risk of mild spanking escalating into harsh spanking and the link between harsh spanking and increases in future child externalizing problems suggest the need to work with parents to find alternatives to spanking for managing their children's behavior.

## Acknowledgments

The Child Development Project has been funded by grants MH42498, MH56961, MH57024, and MH57095 from the National Institute of Mental Health, HD30572 from the National Institute of Child Health and Human Development, and DA016903 from the National Institute on Drug Abuse. Kenneth A. Dodge is supported by Senior Scientist award 2K05 DA015226 from the National Institute on Drug Abuse. We are grateful to the individuals who have participated in this research.

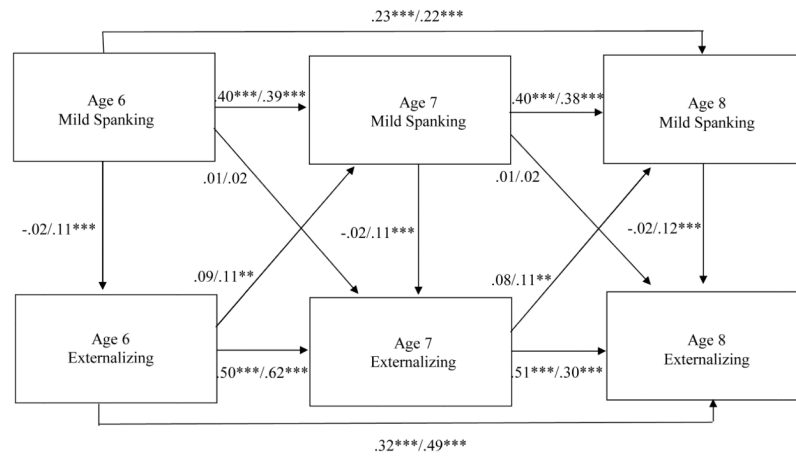
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**Figure 1.** Standardized path coefficients for the model with teacher-reported externalizing are reported before the slash; standardized path coefficients for the model with mother-reported externalizing are reported after the slash.  $n = 258$ .  $**p < .01$ .  $***p < .001$ .

**Table 1**

## Analyses of Covariance Testing Spanking Group Differences in Externalizing

	No Spanking Externalizing <i>M</i> ( <i>SD</i> )	Mild Spanking Externalizing <i>M</i> ( <i>SD</i> )	Harsh Spanking Externalizing <i>M</i> ( <i>SD</i> )	<i>F</i>
Mother-reported externalizing				
Age 6 spanking	6.48 (4.77) <sub>a</sub> ; <i>n</i> = 71	8.46 (6.26) <sub>a</sub> ; <i>n</i> = 171	11.90 (7.32) <sub>b</sub> ; <i>n</i> = 194	6.81 <sup>**</sup>
Age 7 spanking	5.94 (5.51) <sub>a</sub> ; <i>n</i> = 77	8.39 (6.41); <i>n</i> = 176	11.29 (8.43) <sub>b</sub> ; <i>n</i> = 160	3.50 <sup>*</sup>
Age 8 spanking	5.96 (5.53) <sub>a</sub> ; <i>n</i> = 109	8.59 (6.11) <sub>a</sub> ; <i>n</i> = 121	11.59 (8.38) <sub>b</sub> ; <i>n</i> = 138	5.86 <sup>**</sup>
Teacher-reported externalizing				
Age 6 spanking	4.72 (8.29); <i>n</i> = 74	5.69 (9.08); <i>n</i> = 189	8.10 (10.73); <i>n</i> = 217	.42
Age 7 spanking	5.39 (8.98); <i>n</i> = 85	5.80 (9.09); <i>n</i> = 182	8.45 (11.42); <i>n</i> = 176	.93
Age 8 spanking	4.54 (8.75); <i>n</i> = 125	5.85 (8.84); <i>n</i> = 155	8.92 (11.96); <i>n</i> = 156	1.83

*Note.* Each ANCOVA tested differences in externalizing by spanking group in the previous year, controlling for externalizing the year before spanking (e.g., age 6 spanking group differences in age 7 externalizing, controlling for age 5 externalizing). Mothers in the no spanking group reported that they had never spanked the child in the last year. Mothers in the mild spanking group reported that they had never spanked the child with an object in the last year but had spanked the child with a hand less than once a month or about once a month in the last year. Mothers in the harsh spanking group reported that they had spanked the child with an object in the last year, that they had spanked the child with a hand about once a week or about once a day in the last year, or both. Group means denoted with different subscripts differed significantly.

\*  $p < .05$ .

\*\*  $p < .01$ .



**Table 2**  
Descriptive Statistics and Bivariate Correlations for Children Experiencing No Spanking or Mild Spanking Only (n = 258)

	1	2	3	4	5	6
1. Mild spanking: 6	--	.40***	.38***	.22**	.22**	.20**
2. Mild spanking: 7	.40***	--	.49***	.19**	.19***	.20**
3. Mild spanking: 8	.38***	.49***	--	.23**	.21**	.30***
4. Externalizing: Age 6	.07	.09	.18**	--	.63***	.72***
5. Externalizing: Age 7	.07	.03	.12	.53***	--	.63***
6. Externalizing: Age 8	.09	.01	.05	.59***	.65***	--
<i>M</i> (teacher/mother-report)	.72	.67	.52	5.50/8.69	5.36/7.82	4.96/7.42
<i>SD</i> (teacher/mother-report)	.45	.47	.50	8.70/5.85	8.78/5.84	8.34/5.98

Note. Correlations for teacher-reported externalizing are presented below the diagonal; correlations for mother-reported externalizing are presented above the diagonal.

\*\*  
 $p < .01$

\*\*\*  
 $p < .001$ .