



## Relationships between parents' use of corporal punishment and their children's endorsement of spanking and hitting other children

Dominique A. Simons\*, Sandy K. Wurtele

Department of Psychology, University of Colorado at Colorado Springs, 1420 Austin Bluffs Parkway, Colorado Springs, CO 80933, USA

### ARTICLE INFO

#### Article history:

Received 23 January 2007

Received in revised form

17 December 2009

Accepted 4 January 2010

Available online 17 July 2010

#### Keywords:

Corporal punishment

Physical punishment

Intergenerational cycle of violence

Spanking

Aggressive problem solving

### ABSTRACT

**Objectives:** To explore the intergenerational cycle of violence, the present study examined the relationship between parental approval and children's approval of corporal punishment (CP) and the subsequent relationship between children's CP experience and preference for hitting to resolve interpersonal conflict.

**Method:** Participants consisted of 102 families, parents, and children, ages 3–7 years old. Parents were assessed on their reported practices and beliefs about corporal punishment using 3 self-report measures. Fifty-four boys and 48 girls were interviewed by researchers to assess their approval of spanking and hitting.

**Results:** Children whose parents approved of and used CP were more likely to endorse hitting as a strategy for resolving interpersonal conflicts with peers and siblings. Frequent spanking was the strongest predictor of children's acceptance of aggressive problem solving, above and beyond parental acceptance, parental experience of CP, and familial demographics.

**Conclusions:** Findings supported an intergenerational cycle of violence; parents who experienced frequent corporal punishment during childhood perceived its use as acceptable and frequently spanked their children. These children, in turn, advocated that spanking be used as a disciplinary method and preferred aggressive conflict resolution strategies with peers and siblings. These findings support an additional "side effect of spanking;" when parents use CP it teaches their children that hitting is an acceptable means of dealing with conflict.

**Practice implications:** Practitioners should encourage parents to avoid using CP as a disciplinary method which could lead to a change in the attitudes and behaviors of the next generation of parents.

© 2010 Elsevier Ltd. All rights reserved.

### Introduction

According to Straus (1994a), "corporal punishment is the use of physical force with the intention of causing a child to experience pain but not injury for the purposes of correction or control of the child's behavior" (p. 4). The majority of American parents use corporal punishment (CP; including spanking and hitting) to correct their children's misbehavior.

Straus and Stewart (1999) presented data obtained from a nationally representative sample of 991 American parents and found overall prevalence rates (i.e., the percentage of parents using any type of CP during the previous year) varied according to the age of the child. These rates were reported as 35% for infants (0–12 months), 94% for preschool-aged children (3- and 4-year-old), and 13% for older adolescents (age 17). They concluded that CP appears to be a nearly universal aspect of the

\* Corresponding author.

socialization experience of American children, although the frequency and severity of its use varied according to several child and family characteristics.

Researchers have found certain characteristics of parents who tend to use CP. Studies have found that parents in more stressful situations are more likely to use CP (Dietz, 2000; Gershoff, 2002). Specifically, these parents were more likely to be young and unmarried, to have more children and fewer financial resources, and to report lower educational attainment. CP has also been found to be associated with ethnicity and religious affiliation. Studies report more frequent CP use among African American parents (Regaldo, Sareen, Inkelas, Wissow, & Halfon, 2004; Straus & Stewart, 1999) and Conservative Protestant parents (Gershoff, Miller, & Holden, 1999). In addition, CP use has been shown to be more prevalent among parents of male and preschool-aged children and by mothers as compared to fathers (Gershoff, 2002; Straus & Stewart, 1999). Thus, parental characteristics (e.g., ethnicity, education, marital status, and income) and child characteristics (e.g., age and gender) have been shown to influence CP use.

CP use also depends on the type of misbehavior of the child (Catron & Masters, 1993; Socolar & Stein, 1995). Parents report they are more likely to spank for prudential transgressions or when the misbehavior results in a threat to the child's safety (e.g., running into a busy street, lighting matches) as compared to moral transgressions, which include violating others' rights (e.g., stealing, hitting a friend or sibling). Fewer parents approve of using CP for violating social norms or family rules (e.g., disobeying a parent, eating with fingers, interrupting a parent on the phone; Gershoff et al., 1999).

Along with the type of misbehavior, parents' use of CP also depends upon their own experiences with being spanked or hit as a child. Numerous studies have found that the use of CP appears to be intergenerational; parents who were physically punished as children approve of its use, and are more likely to physically punish their own children (e.g., Ateah & Parkin, 2002; Buntain-Ricklefs, Kemper, Bell, & Babonis, 1994; Simons, Whitbeck, Conger, & Chyi-In, 1991; Socolar & Stein, 1995; Straus & Moynihan, 1994).

What accounts for this intergenerational transmission of physical punishment? Recently, theorists have emphasized the importance of considering children's social cognitions, including their attitudes, when attempting to explain the relationship between past experience and subsequent behavior (Crick & Dodge, 1994; Lemerise & Arsenio, 2000). A few studies have examined children's attitudes toward physical punishment. Catron and Masters (1993) asked children if they would recommend CP for various types of transgressions, and found that older children (8–14 years of age) differentiated among misbehaviors deserving CP and only recommended its use for moral and prudential transgressions, consistent with maternal beliefs. In contrast, younger children (4- and 5-year-old) did not differentiate among situations; they regarded all of the transgressions as serious and recommended spanking more frequently than older children. Other researchers have explored possible links between children's spanking experiences and their current attitudes toward spanking. Holden and Zambarano (1992) reported that children's positive attitudes were consistent with their own childrearing experiences of being spanked. Specifically, they found that children who had experienced frequent CP were more likely to report that they would spank, when presented with hypothetical vignettes. More recently, Deater-Deckard, Lansford, Dodge, Pettit, and Bates (2003) found that young adolescents who received higher amounts of CP were more approving of CP compared to teens who had not experienced physical punishment. These authors concluded that "the development of attitudes about the appropriateness and effectiveness of physical forms of punishment is an important component of the social cognitions underlying the intergenerational transmission of physical discipline" (p. 357).

It is possible that through frequent experiences of CP, children may not only develop attitudes about the appropriateness of CP, but also develop attitudes in support of aggressive strategies for resolving interpersonal conflict. When Strassberg, Dodge, Pettit, and Bates (1994) examined the relationship between the reported disciplinary practices of the parents of preschoolers and the children's aggressive behavior toward their peers, they found that children who were spanked behaved significantly more aggressively with their peers than children who were not spanked. This finding suggests that by observing their parents, spanked children may be learning that hitting is an acceptable means of resolving interpersonal conflicts. The potential for this "side effect of spanking" (Benjet & Kazdin, 2003) needs further exploration.

The present study investigated the side effect of spanking by examining the relationship between parental approval and children's approval of the use of CP and the relationship between parental use of CP and children's preference for aggressive conflict resolution strategies. We hypothesized that children who had been frequently spanked in the home would be more likely to endorse CP as a means of punishment for transgressions, and that these children would also be more likely to recommend hitting to resolve social disagreements with both peers and siblings. As parent and child characteristics have been shown to covary with CP, these factors were included and controlled for in the examination of the relationship between children's approval of spanking and aggressive problem solving. It was expected that CP frequency would predict children's acceptance of spanking and willingness to hit to resolve interpersonal conflict, above and beyond parental acceptance and parents' experience of CP during childhood.

## Method

### *Participants*

Participants consisted of 102 families recruited from a southwestern university (61%) and from the community (39%). Participants solicited from the university consisted primarily of psychology undergraduates who received extra credit for their participation; community participants were recruited from newspaper advertisements and received parenting information

**Table 1**  
Family demographics ( $N = 102$ ).

Characteristic	
Type of family	
Two parent	70%
Single mother	28%
Single father	2%
Mean number of children	1.65 (.78)
Parent gender	
Female	81%
Male	19%
Marital status	
Married	68%
Divorced	19%
Separated	8%
Cohabiting	2%
Single	3%
Mean education of parent (in years)	14.35 (2.16)
Average income	\$30,548.91 (21501.99)
Average age of parent (in years)	30.70 (4.95)
Ethnicity	
Caucasian	64%
Hispanic	24%
African American	10%
Pacific Islander	3%
Religious beliefs	
Strong	35%
Moderate	29%
Weak	10%
Not at all	26%

Percentages, means, and (standard deviations) are presented.

as an incentive for participation. There were no significant differences between these 2 groups with respect to demographic characteristics, parental acceptance of CP, parents' CP experience, or frequency of CP use. Initially, 109 children were interviewed, but 7 were excluded from the study; 5 children were unable to provide meaningful responses and 2 children were unable to imagine themselves as the parent in the vignettes.

Demographic characteristics of the participants are presented in Table 1. The majority of respondents were mothers. Most of the sample was comprised of 2-parent families. As the age inclusion criterion for children was 3–7 years, the average age of the child participants was 4.59 years ( $SD = 1.41$ ). Gender distribution was relatively balanced, with a sample of 53% males and 47% females.

### Measures

*The Conflict Tactic Scale, Child Form R (CTS-Child Form R).* CTS-Child Form R of the CTS (Straus, 1979; The study was conducted prior to the publication of the latest version of the Conflict Tactic Scales, *Conflict Tactic Scales Parent Child*, Straus, Hamby, & Warren, 2003) requires respondents to report the frequency with which they have responded to conflict with their children in each of 19 ways. The 19 items range from discussion (reasoning) to physical abuse (violence). The frequency of each response is measured on a 7-point scale ranging from 0 (*never*) to 6 (*more than 20 times*) during the past year. The reported current practice of spanking was derived from the CTS items "slapped or spanked" and "hit with or without an object." Responses to these items were summed to obtain a reported use of spanking score. In the present sample, the average frequency of spanking was 6.70 ( $SD = 8.50$ ). To examine the impact of frequent spanking experience, CTS scores were categorized for analyses. If the responses to both items were "never" a score of 0 was assigned ( $N = 30$ ). Using a median split, participants who reported spanking were assigned a score of 1 (*low spanking*;  $N = 34$ ) or 2 (*high spanking*;  $N = 38$ ). Cronbach's alpha coefficients for the CP items have been reported as .68 for mothers and .50 for fathers (Strassberg et al., 1994), and .62 for parents overall (Straus, 1979). Overall internal consistency in the present study was good ( $\alpha = .75$ ).

*Parent discipline attitudes survey (PDAS).* Parental acceptance of the use of CP was assessed by the parent discipline attitudes survey (PDAS; Buntain-Ricklefs et al., 1994). The PDAS contains 21 items measuring use of physical abuse (16 items), emotional abuse (3 items), and non-physical punishment (2 items; being grounded, having time outs). Parents indicated how frequently they experienced each type of discipline as a child and then rated the perceived acceptability of each form of discipline. The reported frequency and acceptability of each disciplinary item was measured on a 6-point scale, ranging from 0 (*never*) to 5 (*very often*). The scale's authors report an overall internal consistency of .86 and in the present sample, the PDAS demonstrated good internal consistency ( $\alpha = .80$ ).

*Parents' beliefs about punishment vignettes (PBPV).* Parents' beliefs about physical punishment were assessed with a modified version of the vignettes used by Carlson (1984, 1991). Five vignettes were used to illustrate various types of children's transgressions (i.e., moral, social, and prudential). There were three moral transgressions (i.e., a child stealing candy from a store; child hitting a sibling; child hitting a peer), one social convention transgression (i.e., a child disobeying a parent's instruction), and one prudential transgression (i.e., a child running into the street). Parents rated the seriousness of each transgression on a 3-point scale ranging from 1 (*not very serious*) to 3 (*very serious*). They were then instructed to indicate which of 6 responses they would choose if they were the parent portrayed in the vignette. They could choose more than 1 response. The non-physical punishment responses were doing nothing, talking to the child about the behavior, placing the child in time out, and taking away privileges. The physical punishment responses were spanking with a hand and hitting with a belt. In the present study, Cronbach's alpha coefficient for the PBPV items was .79.

*Children's beliefs about punishment vignettes (CBPV).* Children's beliefs about physical punishment were assessed using the same 5 vignettes described in the previous section. However, the vignettes' administration was modified to be developmentally appropriate. The vignettes and responses were presented in the form of pictures. Children were asked to pretend that they were the parents of the child portrayed in the vignette and to point to the picture that best represented their responses. Children rated the seriousness of the same-sex child's misbehavior on a 5-point scale, ranging from 0 (*not very bad*) to 4 (*super bad*) represented by 5 facial expressions. Children were then asked to select from 1 of 6 responses (represented by pictures). The non-physical punishment responses included: do nothing, talk to the child about what she/he did wrong, put him/her in time out, and take away his/her TV privileges. The physical punishment responses were spanking with a hand and hitting with a belt.

*Children's problem-solving vignettes (CPSV).* The children's conflict resolution strategies were assessed using two vignettes portraying typical child disagreements with a peer (who grabs the child's toy) and a sibling (who changes the TV station). Children were asked to pretend that they were the child in each situation and to indicate which of four responses they choose if they were in this conflict; (a) do nothing, (b) try to find a grown-up to help, (c) suggest sharing or compromising, or (d) hit the other child. These responses were presented to the children pictorially and they pointed to the one they would choose for each situation.

With respect to psychometric properties of the child vignettes, the internal consistencies of the CBPV and CPSV was .84 and .80, respectively.

### *Procedure*

Participants were fully informed about the study and written consent and verbal assent to participate were obtained from parents and children, respectively. Anonymity was guaranteed through the use of identification numbers selected by the participants and applied to the questionnaires without the researcher's knowledge. The study received approval from the University's Institutional Review Board.

Assessments were conducted at preschools, in families' homes, or at the University. Each parent was assessed using three measures (i.e., CTS-Child Form R, PDAS, and PBPV), counterbalanced to control for potential order effects. Child participants were individually assessed by trained interviewers who were blind to the study's hypotheses. Each child was assessed using the children's beliefs about punishment followed by the children's problem-solving vignettes. The vignettes were read to the children and they were asked to select a pictorial solution to the conflict.

Upon conclusion of the assessment, participants were debriefed and offered information regarding intervention services, parenting literature and classes, and support groups.

## **Results**

### *Parental beliefs regarding corporal punishment*

*Parental childhood experiences of corporal punishment and approval of and use of corporal punishment.* To examine the relationships among parental experience of CP, approval of CP use, and current use of CP, one-tailed Pearson's correlation tests were used to analyze the scores obtained from the PDAS (i.e., parental experience and approval of CP) and CTS-Child Form R (current CP use). Eighty-two percent of parents reported experiencing some form of corporal punishment during childhood and 71% of parents in the current sample reported using CP with their children. Results indicated that the frequency of parental experience of physical punishment was significantly related to their approval of its use,  $r(102) = .39, p < .0005$ ; and parental approval of CP was significantly related to the frequency of reported use with their children,  $r(102) = .74, p < .0005$ .

### *Parents' and children's beliefs about spanking*

*Comparison of parents' and children's approval of spanking and hitting by transgression.* Parental and child discipline selections were coded into 1 (*spanking*) and 0 (*non-spanking*) categories for analyses. Chi-square tests were used to examine potential relationships among child characteristics and parental approval of CP with subsequent children's approval of CP use for each

**Table 2**  
Comparison of parent and child approval of spanking by transgression.

Transgression	Parent approval (N)	Child approval (N)	Agreement (%)	$\chi^2$	$\Phi$
Disobeying parent	2	2	100	6.63**	.26**
Stealing	15	11	73	21.20***	.46***
Hitting sibling	24	24	100	23.80***	.48***
Fighting with peer	4	4	100	5.27*	.23*
Running out into street	33	17	52	4.90*	.22*

Note: Approval scores were obtained from the PBPV and the CBPV; Chi-square test ( $\chi^2$ ) and the measure of association, Phi ( $\Phi$ ) are presented.

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .0005$ .

transgression. With respect to child characteristics, there were no significant associations found between child gender and willingness to spank or hit either the peer or sibling. Children's ages were categorized into younger (less than age 5) and older (ages 5–7). Younger children ( $N = 55$ ) advocated spanking significantly more often in response to all 5 transgressions compared to older children ( $N = 47$ ). The majority of the younger children advocated spanking for hitting a sibling (87%) and fighting with peer (55%) as compared to the older children (21% and 32%, respectively),  $p < .05$ . For the other transgressions (i.e., disobeying a parent, stealing, and running out into the street), younger children (36–46%) were also more likely than older children (9–26%) to endorse spanking as a consequence,  $p < .05$ . With respect to conflict resolution, acceptance of hitting was dependent upon age,  $\chi^2 (1, N = 102) = 15.70, p < .005, \Phi = .40$ ; 44% of the younger children advocated hitting to resolve a peer conflict in comparison to 9% of the older children. There was also a strong association between age and approval of hitting a sibling,  $\chi^2 (1, N = 102) = 15.58, p < .0005, \Phi = .39$ . Sixty percent of the younger children were willing to hit a sibling in comparison to 21% of the older children.

As can be seen in Table 2, significant relationships were found between parental approval of spanking and children's approval of spanking for all transgressions. For three of the transgressions (i.e., disobeying a parent, hitting a sibling, and fighting with peer), there was 100% agreement between parental and children's approval of spanking.

*Relationship between children's spanking experience and approval of spanking and hitting.* To examine the relationship between frequency of spanking experience (i.e., none, low, and high) and approval of spanking and hitting, chi-square tests were conducted on the categorized CTS-Child Form R variables and the endorsement of spanking and hitting obtained from the CBPV and CPSV. Results indicated that children who were frequently spanked were more likely to endorse spanking as a corrective action for misbehavior in comparison to those children who were spanked less frequently and children who were never spanked (Table 3). The majority (87%) of children who experienced frequent physical punishment were more likely to endorse physical punishment as a consequence for hitting a sibling in comparison to 20% of children who were never spanked ( $V = .55, p < .0005$ ). There were strong associations between spanking experience and willingness to hit to resolve conflicts between peers and siblings. Of the children who were never physically punished, 100% advocated the use of pro-social conflict resolutions with peers and siblings. In contrast, 63% of the children who were frequently spanked (*high spanking*) were willing to hit a peer during a conflict in comparison to 12% children who were spanked less frequently (*low spanking*). Similarly, 79% of children who had experienced frequent spanking (*high spanking*) were more likely to endorse hitting during a disagreement with a sibling in comparison to 38% of children who were spanked less frequently (*low spanking*).

**Table 3**  
Relationship between Children's spanking experience and approval of spanking and hitting.

Transgression	Frequency of spanking experiences			$\chi^2$	V
	No spanking (N = 30)	Low spanking (N = 34)	High spanking (N = 38)		
	Approval of spanking				
Disobeying parent (N = 24)	3 (10%)	6 (18%)	15 (39%)	9.08**	.30**
Stealing (N = 26)	0	7 (21%)	19 (50%)	22.71***	.47***
Hitting sibling (N = 58)	6 (20%)	19 (56%)	33 (87%)	30.56***	.55***
Fighting with peer (N = 45)	7 (23%)	17 (50%)	21 (55%)	7.65*	.27*
Running out into street (N = 37)	3 (10%)	12 (35%)	22 (58%)	16.66***	.40***
	Approval of hitting				
Peer conflict (N = 28)	0	4 (12%)	24 (63%)	39.80*	.63***
Sibling conflict (N = 43)	0	13 (38%)	30 (79%)	43.17*	.65***

Note: Numbers (and percentages) of children who endorse spanking and hitting are presented. Chi-square test ( $\chi^2$ ) and the measure of association, Cramer's statistic (V) are presented. Children's approval of spanking and hitting were obtained from the CBPV and CPSV. Frequency of spanking experience categories were obtained from the CTS-Child Form R.

\*  $p < .01$ .

\*\*  $p < .001$ .

\*\*\*  $p < .0005$ .

**Table 4**  
Hierarchical regression analysis for variables predicting children's spanking approval ( $N = 102$ ).

Variable	Model 1			Model 2			Model 3		
	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$	<i>B</i>	<i>SE B</i>	$\beta$
<b>Demographics</b>									
Ethnicity	.37	.52	.06	.49	.50	.08	.18	.41	.03
Marital status	.63	.38	.14	.42	.37	.10	.29	.31	.06
Income	-.12	.09	-.16	-.07	.09	-.09	-.04	.07	-.05
Education	-.17	.09	-.21	-.16	.10	-.20	-.127	.08	-.16
Age of child	-1.32	.30	-.38*	-1.13	.30	-.33*	-.53	.25	-.16*
<b>Parent characteristics</b>									
CP experience				.16	.07	.23**	.11	.08	.29***
CP acceptance				.08	.03	.27**	.14	.07	.24*
Spanking <sup>a</sup>							.22	.03	.83***
$R^2$	.33	.37	.61						
<i>F</i> for change in $R^2$	9.39***	3.41*	54.32***						

Note: *B*: unstandardized regression coefficient, *SE B*: standard error of unstandardized regression coefficient,  $\beta$ : standardized regression coefficient.

<sup>a</sup> Frequency of spanking experience.

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .005$ .

### Predicting children's endorsement of spanking and hitting

Hierarchical regression analyses were used to examine the degree to which children endorse spanking across the five transgressions (CBPV items were summed to create a continuous variable for spanking endorsement for a maximum score of five). For the regression analyses, the control variables were entered in the first model, the parental characteristics were entered in the second model, and the frequency of spanking experience was entered in the third model. Demographic variables included African American ethnicity, single parenthood, lower income, lower education, and younger children (ethnicity and marital status variables were dummy-coded for analyses).

As summarized in Table 4, demographic characteristics explained 33% of the variance in children's endorsement of spanking. When parental characteristics of CP acceptance and experience of CP during childhood were included in the regression, the amount of variance explained in spanking endorsement increased to 37%. Children's experience of frequent spanking predicted an additional 23% of the variance in children's spanking endorsement. In the final model, young age of the child, parents' CP experience, parents' acceptance of CP, and children's experience of spanking predicted unique variance of children's spanking endorsement.

Logistical regression analysis was used to examine whether frequency of spanking predicts the endorsement of resolving conflict by hitting after controlling for parental acceptance and experience of CP. Inter-correlations showed that the following demographic factors were associated with children's endorsement of hitting to resolve conflicts: child gender, marital status, parent education, and the age of the child; these variables were controlled for in the analyses. Child gender (i.e., male) and marital status (i.e., single) variables were dummy-coded for analyses.

As indicated in Table 5, these demographic factors were predictive of children's approval of hitting,  $\chi^2(4, N = 102) = 46.61$ ,  $p < .0005$ . The addition of parental acceptance and CP experience further increased the overall prediction of children's willingness to hit to resolve conflict,  $\chi^2(6, N = 102) = 70.43$ ,  $p < .0005$ . Frequent experience of spanking reliably increased the prediction of children's approval of hitting after controlling for demographic characteristics and parental acceptance and experience of CP,  $\chi^2(7, N = 102) = 95.86$ ,  $p < .0005$ . Frequency of spanking was the strongest predictor of children's endorse-

**Table 5**  
Logistical regression analyses for variables predicting children's endorsement of hitting to resolve conflict ( $N = 102$ ).

Predictor	<i>B</i>	<i>SE</i>	<i>OR</i>
<b>Block 1</b>			
Child gender	.95	.99	2.59
Marital status	.13	1.01	1.87
Parent education	-.52	.29	.592
Child's age	-2.03*	.87	.131
<b>Block 2</b>			
CP experience	.02	.10	1.97
CP acceptance	.31	.27	1.73
<b>Block 3</b>			
Spanking <sup>a</sup>	.89**	.28	2.43

Note: *B*: logistic regression coefficient (standardized); *SE*: standard error; and *OR*: odds ratio.

<sup>a</sup> Frequency of spanking experience.

\*  $p < .05$ .

\*\*  $p < .01$ .

ment of hitting to resolve conflict; for every standard deviation increase in frequency of spanking, the odds of resolving interpersonal conflict with aggression increased significantly by a factor of 2.43.

## Discussion

Results of this study provide evidence that parental attitudes and behaviors concerning the use of corporal punishment can be transmitted to their children. Parents who experienced frequent spanking as children were more likely to approve of its use as a punishment strategy. Consistent with Buntain-Ricklefs et al. (1994), these findings illustrate that CP experience predicts CP acceptance. Also consistent with previous studies (Straus, 1994a), a significant positive relationship was found between parents' approval of the use of CP and reported frequency of its use with their own children. In turn, children who were frequently spanked at home were more likely to prescribe spanking for child misbehavior. Findings obtained from two generations were robust, and showed a significant positive relationship between CP acceptance and reported use. Positive attitudes toward CP appear to be influential to the intergenerational transmission of this method of punishing children. As suggested by Holden and Zambarano (1992), parents who endorse spanking and frequently use it are "passing the rod to their children." Likewise, Deater-Deckard et al. (2003) concluded that "attitudes concerning the efficacy and benign nature of corporal punishment are likely essential to the intergenerational transmission of this method of discipline" (p. 358).

Like the majority of American parents, most parents (71%) in our study endorsed spanking as a disciplinary strategy (even though our participants were fairly well educated and had moderate incomes and few children). The noun *discipline* stems from the Latin word *discere* (to learn). Ideally, parents use disciplinary strategies to teach their children desirable patterns of behavior which helps them develop self-control and responsibility for their own behavior. However, as suggested by Straus (1994b), there is a hidden curriculum that accompanies each use of CP. When parents use CP, it teaches children about the morality of hitting; that it is morally acceptable to hit those you love when they "do wrong." Indeed, frequent spanking was the strongest predictor of children's acceptance of hitting as a disciplinary method. Benjet and Kazdin (2003) suggested that hitting a child may send a message to the child that violence is a reasonable way of interacting with others, but noted that this possible side effect of spanking had not been empirically determined. Present findings provide support for their assertion, and suggest that CP may have a significant impact on children's development.

Consistent with previous research, parents' recommendations for the use of CP depended upon the type of misbehavior of the child. Support for spanking was highest in response to situations where a child's behavior presented a threat to his or her safety (i.e., a prudential transgression), whereas few parents approved of using CP for violating social norms. Alarming, one-fourth of the parents indicated that they would spank a child who had hit a sibling, and within these families there was 100% agreement between parents' and children's approval of CP for hitting a sibling. It would appear as if these children are learning from their parents that hitting others is acceptable, even within the family. Indeed, their learning history appears to be quite influential.

Children also appeared to generalize this message to conflict situations, as indicated by their approval of hitting to resolve conflicts with peers and siblings. This study extends previous work on intergenerational transmission by assessing children's intentions for resolving interpersonal conflicts. Children whose parents approved of and used CP were more likely to endorse hitting as a strategy for resolving interpersonal conflicts with peers and siblings. As expected, frequent spanking was the strongest predictor of children's acceptance of aggressive problem solving, above and beyond parental acceptance, childhood history of CP, and familial demographics. Indeed, the higher the frequency of spanking in the home, the more likely the children were to say that they would hit a peer or a sibling during conflict. Note that these were not severe conflicts; in the peer situation, one child grabbed a toy from another child; in the sibling situation, a sibling wanted to watch a different TV show. Yet the overwhelming majority of children in the high-spanking homes indicated that they would hit the peer (63%) and sibling (79%) in these situations. Not one child from a no spanking home chose to resolve these conflicts by hitting. Clearly, children do *learn* from their parents' discipline strategies. They learn that it is acceptable to hit others to resolve conflicts.

Although there were several strengths of this study (e.g., inclusion of fathers, measurement of the attitudes and behaviors of both parents and their children), limitations must be acknowledged. Most importantly, data in the present study were correlational and based solely on self-report of behaviors and attitudes. Consequently, problems of recall, social desirability, and the accuracy of retrospective assessment may have affected the results. To minimize potential reporting bias, we guaranteed anonymous reporting. Given the parents' high rates of reported use of CP, it would appear that this procedure reduced their social desirability concerns. Although we included only those children who appeared able to imagine themselves as parents in the vignettes, developmental limitations of young children should be taken into account when interpreting the findings.

Also, this study was conducted in two different settings with different incentives offered to participants. Undergraduates volunteered to receive extra credit whereas community participants volunteered in exchange for educational materials, raising the possibility that the two groups differed on motivations for participating. However, analyses confirmed that there were no pre-existing differences between the two groups. Rather than a limitation, we consider the inclusion of the two groups to be a strength of the study, suggesting that the findings are robust across two participant groups. Nonetheless, as attitudes toward and use of CP vary by ethnicity, education, and income levels, it would be important for future studies to use a larger and more diverse sample of families. Future research should also include direct measures of spanking along with observations of children's actual conflict resolution strategies. In addition, we included a limited set of predictor variables.

For example, we did not assess the context within which discipline practices were used and thus were not able to determine whether CP occurred in the context of a supportive or unsupportive home environment. And we acknowledge that parents are by no means the exclusive source of influence. As children age, peers, school, and the media are influential non-parental sources of information and modeling. But with the young children in this study, most of the lessons they learned about spanking likely came from personal experience at home.

The present findings add to the growing body of research on the correlates of spanking, which will help inform parents, professionals, and policy makers about corporal punishment's potential effects on attitudes and behaviors. The findings also have implications for counseling. Counselors, home visitation professionals, and pediatricians during well-child visits (see American Academy of Pediatrics, 1998) should discourage parents from spanking their children. Doing so could lead to children having less positive attitudes toward spanking their own children and hitting their peers and siblings, possibly bringing about a change in the attitudes and behaviors of the next generation of parents.

## Acknowledgements

The authors acknowledge the following professionals for their assistance in the present study: Christine Tyler, Donald Morley, Todd Simons, Julie Williams, and Sean Ahlmeyer.

## References

- American Academy of Pediatrics. (1998). Guidance for effective discipline. *Pediatrics*, *101*, 723–728.
- Ateah, C. A., & Parkin, C. M. (2002). Childhood experiences with and current attitudes toward corporal punishment. *Canadian Journal of Community Mental Health*, *21*, 35–46.
- Benjet, C., & Kazdin, A. E. (2003). Spanking children: The controversies, findings, and new directions. *Clinical Psychology Review*, *23*, 197–224.
- Buntain-Ricklefs, J. J., Kemper, K. J., Bell, M., & Babonis, T. (1994). Punishments: What predicts adult approval. *Child Abuse & Neglect*, *18*, 945–955.
- Carlson, B. E. (1984). Children's beliefs about punishment. *American Journal of Orthopsychiatry*, *56*, 308–312.
- Carlson, B. E. (1991). Emotionally disturbed children's beliefs about punishment. *Child Abuse & Neglect*, *15*, 19–28.
- Catron, K. R., & Masters, J. C. (1993). Mother's and children's conceptualizations of corporal punishment. *Child Development*, *64*, 1815–1828.
- Crick, N. R., & Dodge, K. A. (1994). A review and reformulation of social information-processing mechanisms in children's social adjustment. *Psychological Bulletin*, *115*, 74–101.
- Deater-Deckard, K., Lansford, J. E., Dodge, K. A., Pettit, G. S., & Bates, J. E. (2003). The development of attitudes about physical punishment: An 8-year longitudinal study. *Journal of Family Psychology*, *17*, 351–360.
- Dietz, T. L. (2000). Disciplining children: Characteristics associated with the use of corporal punishment. *Child Abuse & Neglect*, *24*, 1529–1542.
- Gershoff, E. T. (2002). Corporal punishment by parents and associated child behaviors and experiences: A meta-analytic and theoretical review. *Psychological Bulletin*, *128*, 539–579.
- Gershoff, E. T., Miller, P. C., & Holden, G. W. (1999). Parenting influence from the pulpit: Religious affiliation as a determinant of parental corporal punishment. *Journal of Family Psychology*, *13*, 307–320.
- Holden, G. W., & Zambarano, R. J. (1992). Passing the rod: Similarities between parents and their young children in orientation toward physical punishment. In I. E. Sigel, A. V. McGillicuddy-DeLisi, & J. J. Goodnow (Eds.), *Parental belief systems: The psychological consequences for children* (2nd ed., pp. 143–172). Hillsdale, NJ: Erlbaum.
- Lemerise, E. A., & Arsenio, W. F. (2000). An integrated model of emotion processes and cognition in social information processing. *Child Development*, *71*, 107–118.
- Regaldo, M., Sareen, H., Inkelas, M., Wissow, L. S., & Halfon, N. (2004). Parents' discipline of young children: Results from the National Survey of Early Childhood Health. *Pediatrics*, *113*, 1952–1958.
- Simons, R. L., Whitbeck, L. B., Conger, R. D., & Chyi-In, W. (1991). Intergenerational transmission of harsh parenting. *Developmental Psychology*, *27*, 159–171.
- Socolar, R. R. S., & Stein, R. E. K. (1995). Spanking infants and toddlers: Maternal belief and practice. *Pediatrics*, *95*, 105–111.
- Strassberg, Z., Dodge, K. A., Pettit, G. S., & Bates, J. E. (1994). Spanking in the home and children's subsequent aggression toward kindergarten peers. *Development and Psychopathology*, *6*, 445–461.
- Straus, M. A. (1979). Measuring intrafamily conflict and violence: The conflict tactics scales. *Journal of Marriage and the Family*, *41*, 75–88.
- Straus, M. A. (1994a). *Beating the devil out of them: Corporal punishment in American families*. New York: Lexington Books.
- Straus, M. A. (1994b). Should the use of corporal punishment by parents be considered child abuse? Yes. In M. A. Mason, & E. Gambrell (Eds.), *Debating children's lives* (pp. 197–203). Thousand Oaks, CA: Sage.
- Straus, M. A., Hamby, S. L., & Warren, W. L. (2003). *The conflict tactics scales handbook: Revised conflict tactics scale (CTS2); CTS: Parent-child version (CTSPC)*. Los Angeles, CA: Western Psychological Services.
- Straus, M. A., & Moynihan, M. M. (1994). Who spans the most? In M. A. Straus (Ed.), *Beating the devil out of them: Corporal punishment in American families* (pp. 49–63). New York: Lexington Books.
- Straus, M. A., & Stewart, J. H. (1999). Corporal punishment by American parents: National data on prevalence, chronicity, severity, and duration in relation to child and family characteristics. *Clinical Child and Family Psychology Review*, *2*, 55–70.