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Associations Between Corporal Punishment
and Behavioral Adjustment in Preschool-Aged Boys and Girls

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Abstract

The purpose of this study was to determine whether externalizing and internalizing outcomes in preschool-aged children are associated with harsh parental discipline, and whether the child's gender plays a role in this relationship. 237 three-year-old children were part of a longitudinal study of preschoolers at risk for school-age conduct problems. Questionnaires were completed by mothers to assess the child's behavior, parenting styles, and their current marital relationship. It was hypothesized that harsh parental discipline would be linked with externalizing and internalizing outcomes for preschool-aged children. It was also hypothesized that boys would exhibit more externalizing problems than girls and that girls would exhibit more internalizing problems than boys. Mothers completed the Child Behavior Checklist/2-3 to assess the toddler's behavioral and emotional problems, as well as the Parenting Dimensions Inventory to assess corporal punishment. Results indicated that boys experienced significantly more corporal punishment than girls, but there were no significant gender differences in internalizing or externalizing scores. Externalizing and internalizing scores were significantly positively correlated. As hypothesized, corporal punishment was significantly positively correlated with internalizing and externalizing problem behavior. Internalizing scores were significantly positively correlated with corporal punishment for boys, but not for girls.

Associations Between Corporal Punishment and Behavioral Adjustment in Preschool-Aged Boys and Girls

Current research has linked parents' use of corporal punishment with serious negative developmental outcomes including aggression, criminal and antisocial behavior, abuse of their own child or spouse, and victim of abuse by their own parent (Gershoff, 2002). In childhood, researchers have shown that harsh forms of discipline are linked with internalizing as well as externalizing behaviors (Bender, Allen, McElhaney, Antonishak, Moore, Kelly, & Davis, 2007). Gershoff (2002) conducted a meta-analysis of the link between parental corporal punishment and eleven child behaviors and experiences. The study concludes that corporal punishment promotes hostile attributions, which predicts violent behavior. First, it initiates coercive cycles of aversive behaviors between the parent and child. In addition, it erodes the parent-child relationship and in turn decreases children's motivation to internalize parents' values and those of the society, which in turn results in low self-control. Furthermore, corporal punishment can evoke feelings of fear, anxiety, and anger in children. It is also linked with decreases in children's feelings of confidence and assertiveness and increases in feelings of humiliation and helplessness. Finally, it may lead victims to be more likely to resort to aggression and violence during conflicts with their own children and spouses (Gershoff, 2002). In other recent studies, physical punishment has been linked with higher levels of physical aggression, verbal aggression, antisocial behavior, and behavior problems (e.g. Gershoff, 2008; Mulvaney & Mebert, 2007; Swinford, DeMaris, Cernkovich, & Giordano, 2000). Furthermore, frequent and harsh physical punishment has been linked with impairments in children's mental health, including depression and anxiety, alcohol and drug misuse, and general psychological maladjustment (Gershoff, 2007; Harper, Brown, Arias, & Brody, 2006; Rodriquez, 2003).

Conversely, parental support, monitoring, and avoidance of harsh punishment have been linked with positive outcomes among children such as higher school grades, fewer behavior problems, less substance use, better mental health, greater social competence, and more positive self-concepts (Amato & Fowler, 2002). Therefore, when parents depend on hitting and yelling as methods of responding to children's misbehavior, children's well-being declines (Amato & Fowler, 2002). In addition, family conflict, parental rejection and hostility, lack of parental warmth, and inadequate parental care and support have been found to be linked with internalizing problems (e.g., depression and/or anxiety) in children (Bolger & Patterson, 2001). These factors could be considered forms of harsh parental discipline since the child faces adverse circumstances, rather than positive parental support. Children who experience less positive and responsive parenting also may be more likely to experience difficulties in emotion regulation (Bolger & Patterson, 2001).

Straus (2001) reviewed landmark studies showing the negative effects of harsh parental discipline based on large and nationally representative samples of American children. One longitudinal study found that the more corporal punishment used during the first year of the study, the greater the tendency for child antisocial behavior to increase subsequent to the corporal punishment (Straus, Sugarman, & Giles-Sims, 1997). The findings suggest that if parents use nonviolent modes of discipline instead of violent modes of discipline, the risk level of antisocial behavior among children would decrease and therefore lower the level of violence in American society. A study on corporal punishment and dating violence found that the more corporal punishment experienced by boys in a longitudinal study, the greater the probability of their physically assaulting a girlfriend (Simons, Lin, & Gordon, 1998). Finally, another longitudinal study showed that the less corporal punishment parents used with toddlers, the

greater the probability that the child will have an above average cognitive growth (Straus & Paschall, 1999). It is known that in the brain, the most rapid growth of neural connections occurs at early ages (Bruer, 1999). Also, these neural connections provide the necessary basis for subsequent cognitive development (Bruer, 1999). According to these studies, corporal punishment places children at elevated risk for juvenile violence, wife-beating, masochistic sex, low educational and occupational attainment, and higher rates of depression and alcohol (Straus, 2001). Other studies have also shown that there is a unique negative impact of corporal punishment on children's behavior problems. Corporal punishment is linked with increased internalizing behaviors during toddlerhood (e.g., depression and lower self-esteem) and with increased externalizing behaviors (e.g., aggression) both in toddlerhood and first grade (Mulvaney & Mebert, 2007).

Distinguishing Corporal Punishment from Physical Abuse

Most people think of abuse as a severe form of corporal punishment and therefore believe that abuse is harmful while corporal punishment is not (Gershoff, 2002). However, it is difficult to define the point where corporal punishment ends and abuse begins. Physical abuse may occupy an extreme point on the continuum whereas harsh physical discipline may occupy a less extreme but more prevalent point (Bender et al., 2007). Since they both lay along a continuum, if corporal punishment is administered too severely or too frequently, the outcome can result in physical abuse (Gershoff, 2002). In 2004 alone, 422 children died in the United States as a direct result of physical abuse by parents and in an additional 450 child deaths, physical abuse may have been combined with other forms of maltreatment to cause the child's death (Gershoff & Bitenski, 2007). Children who experienced corporal punishment, such as pinching or spanking, are seven times more likely than others to manifest severe violence, such as punching or hitting

with an on object, compared with children who have not experienced corporal punishment (Clément, Bouchard, Jetté, & Laferrière, 2000).

Corporal punishment is defined as 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 (Gershoff, 2002). However, research indicates that physical punishment does not promote long-term, internalized compliance and therefore does not indicate long-term control of the child's behavior. In fact, the more children receive physical punishment, the more defiant they are and the less likely they are to empathize with others (Gershoff, 2008). Many people believe that corporal punishment is acceptable and abuse is not (Straus, 2001). Yet, both have been proven to be harmful to children and to have negative effects. Therefore, it is necessary to understand the implications of corporal punishment, in addition to abuse, and to illustrate how both produce negative outcomes.

Prevalence and Incidence Rates

According to a nationally-representative survey of parents performed in 1995, it was found that 35% of infants, 94% of toddlers, and over 50% of twelve-year-old children had experienced some form of parental physical discipline during the previous year (Mckee, Roland, Coffelt, Olson, Forehand, Massari, Jones, Gaffney, & Zens, 2007). Also, parents who spanked a toddler did it an average of about three times a week. 28% of parents of children aged five to twelve used an object such as a belt or hairbrush and over one third of parents of thirteen-year-old children hit them that year (Straus, 2001). Younger children are the ones most likely to endure spanking since it seems to peak in the toddler years, with the vast majority (greater than 90%) experiencing physical discipline. The rate of spanking then decreases after age five from about 50% to a low of about 10% by age seventeen (Christie-Mizeel, Pryor, & Grossman, 2008). Research shows that children who are young, male, Southern, economically disadvantaged,

inner-city residents, or have psychologically distressed parents tend to experience this type of corporal punishment with a higher frequency (Christie-Mizeel et al., 2008). Given these statistics, along with the negative effects linked with corporal punishment, it is crucial to examine the effects of harsh parental discipline on preschool-aged children. Furthermore, it is necessary to research gender differences and to determine whether boys and girls experience internalizing behavior, such as anxiety, and externalizing behavior, such as aggression, differently. Corporal punishment occurs frequently and exists in varying degrees. Since harsh discipline can have a long-term negative outcome for children, it is necessary to examine the extent of this impact.

Laws Regarding Corporal Punishment

While the statistics illustrate that corporal punishment in the United States is high, physical punishment is not universally practiced. By 2007, there were twenty-three countries with total bans on corporal punishment. An additional 91 of the world's 231 countries and principalities have prohibited corporal punishment of children by teachers or school administrators (Gershoff & Bitensky, 2007). The first country to do so was Sweden. Since 1928, the physical punishment of students was abolished in secondary schools. In 1957, the Penal code defense for parental use of physical punishment was repealed. Finally, in 1979, Sweden became the first industrialized country to explicitly ban all forms of physical punishment by all caregivers in an attempt to change parental attitudes toward this practice and their use of it (Durrant, Rose-Krasnor, & Broberg, 2003). In Sweden, the percentage of adults who hold positive attitudes toward spanking has now declined from over 50% in the 1960s to 10% in 2000, suggesting the success of these laws (Gershoff, 2008). Furthermore, the establishment of The United Nations Convention on the Rights of The Child Right (1989) is unique in being the first

international treaty to focus solely on the physical, social, cultural, political, and civil right of children. This treaty has been ratified by 192 countries around the world. However, the United States is one of only two countries (along with Somalia) that has signed, but not ratified it (Gershoff & Bitensky, 2007).

In some countries, the law does not only allow corporal punishment, but justifies it. According to section 43 of the Canadian Criminal Code, “every school teacher, parent, or person standing in the place of a parent is justified in using force by way of a correction toward a pupil or child, as the case may be, who is under his care, if the force does not exceed what is reasonable under the circumstances (Durrant et al., 2003).” This is similar in the United States where physical punishment by parents is permitted in 49 states by statute or court decisions (the exception being Minnesota) (Gershoff & Bitensky, 2007). This legal standing of corporal punishment reflects public opinion that children are in essence the property of their parents and that parents have the right to raise them as they choose (Gershoff & Bitensky, 2007). Furthermore, in the *Ingraham v. Wright* (1977) the court upheld that school physical punishment does not violate the Constitution’s Eight Amendment prohibition of “cruel and unusual punishments.” Yet, there are 28 states and the District of Columbia that prohibit all physical punishment in public schools. Also, there are some states that permit public school physical punishment that have delegated authority to local school districts to prohibit the practice (Gershoff & Bitensky, 2007). However, the ban does not usually extend to private schools, the exceptions being New Jersey and Iowa (Gershoff, 2008). Physical punishment is prohibited in all state-regulated center-based childcare in 48 states. Within the child welfare system, 49 states prevent physical punishment in foster care settings. It is also prohibited in juvenile detention facilities in 30 states and in residential care for children, including group homes or institutions, in

44 states (Gershoff, 2008). Unfortunately, these statistics show that laws regarding corporal punishment are inconsistent. Further studies must be conducted to educate parents and lawmakers of the dangers of corporal punishment.

Alternative Modes of Discipline

Recently, research has illustrated the benefits to children, parents, and to society that could occur if corporal punishment ended. Some have argued that a lack of corporal punishment means a lack of discipline; however, this is not the case (Straus, 2001). There are other methods that could be used that do not involve spanking, or other forms of corporal punishment. The idea that spanking works when other methods do not is so embedded in American culture that when the child repeats the behavior an hour or two later, parents fail to recognize that spanking has the same failure rate as other modes of discipline. Therefore, they spank again and will continue to do so until the child listens. However, they do not understand that reinforcing other modes of discipline will be even more effective (Straus, 2001). Alternatively, it would be beneficial to center on interventions that educate parents to increase the amount of intellectual stimulation in the home (Grogan-Kaylor & Otis, 2007).

The Role of Gender

A large body of research has focused on examining variables that predict parent spanking. For example, a study performed by Grogan-Kaylor and Otis (2007) examined the prevalence and the chronicity of spanking in a nationally representative sample of parents. They found that children who displayed greater amounts of externalizing behavioral problems were more likely to be recipients of corporal punishment. It is also important to note that the gender of the physically punishing parent influenced the effects of corporal punishment. A study by Harper, Brown, Arias, and Brody (2006) was conducted to determine whether parental support

moderated the effects of corporal punishment on child outcomes. More specifically, the study examined whether the gender of the supportive parent moderated the effects of punishment from the opposite-sex parent. The authors found that the impact of maternal corporal punishment on children's aggression varied according to the level of paternal support. At low levels of support, mothers' corporal punishment was linked with high levels of child aggression; however, high paternal support seemed to protect against externalizing outcomes for children. On the other hand, high maternal support only protected children from depression at low levels of low paternal corporal punishment. As paternal corporal punishment increased, so did child depression. Also, maternal support was not linked to child aggression and it did not prevent children from externalizing behavior outcomes in the context of paternal corporal punishment (Harper et al., 2006). Furthermore, the study found that mothers engaged in more corporal punishment than fathers, which may be the result of mothers spending more time with the children compared to fathers; however, boys received significantly higher levels of punishment from fathers than girls (Harper et al., 2006).

In another study, male adolescents were more likely than females to receive harsh discipline from their fathers, but equally likely to receive discipline from their mothers (Bender et al., 2007). Furthermore, both maternal and paternal harsh discipline was positively linked with adolescent symptoms and was more likely to endorse depression, anxiety, and externalizing behavior. Maternal harsh discipline was also associated with adolescent difficulties expressing warmth and engagement (e.g., relatedness) in interactions with their mothers (Bender et al., 2007). In addition, adolescents with a history of harsh maternal discipline were less likely to maintain a strong relationship with their mothers during a conflict. For example, they were less engaged in discussions, less likely to agree or show empathy, and less interested in asking about

the mother's position (Bender et al., 2007). Seeing that mothers and fathers were associated with different outcomes, it is necessary to further examine the effects of corporal punishment in the context of parent and child gender. For example, boys at all ages were more likely to receive harsh physical discipline and harsh physical discipline was more likely to be used by mothers than by fathers (Grogan-Kaylor & Otis, 2007). Furthermore, harsh discipline in the context of the same gender dyads, such as mothers and daughters and fathers and sons, were more strongly correlated with externalizing problems than in mixed sex dyads (McKee et al., 2007).

Methodological Limitations

Although much research has been conducted concerning the negative effects of corporal punishment, there are many limitations. One problem with studying corporal punishment is the way it has been measured; self-reports can be very misleading. For example, asking parents whether they spank their child and how often could easily result in distorted information. They might be too afraid to answer truthfully or they might believe that their version of spanking is not actually considered corporal punishment, both leading to underreporting. Also, if a questionnaire only asks for frequency of spanking, it is up to the parent to define spanking (Grogan-Kaylor & Otis, 2007).

Another limitation is that the relationship between corporal punishment and negative outcomes can be bi-directional. For example, harsh parental discipline may cause children to develop emotional problems; however, symptomatic children may also elicit anger and strong discipline from parents. Most studies have not clearly determined bidirectional associations between parent and child behavior (Bender et al., 2007). Finally, a third confounding variable might predict both parental corporal punishment and child problem behaviors, thus complicating our understanding of this relationship (Gershoff & Bitensky, 2007).

Research Goals and Hypotheses

While there is an increasing amount of research on the negative effects of harsh parental discipline on school-aged children (e.g. Amato & Fowler, 2002; Bolger & Patterson, 2001; McKee et al., 2007; Rodriquez, 2003), less is known about the specific negative effects on preschool-aged children. As suggested, the strongest link between negative consequences and corporal punishment include the connection between corporal punishment and externalizing behavior problems, especially aggression. Furthermore, internalizing problems, such as depression and lower self-esteem, are also linked to parental corporal punishment (Mulvaney & Mebert, 2007). However, few studies have addressed gender differences in preschool-aged boys and girls. It is important to determine whether boys or girls who received physical punishment show a difference in internalizing versus externalizing outcomes, or whether they show the same outcomes.

The purpose of this study was to determine whether externalizing and internalizing outcomes in preschool-aged children were associated with harsh parental discipline, and whether the child's gender played a role in this relationship. Another goal of the study was to examine the possible interaction between harsh punishment and gender, and how this interaction was related to psychopathology in preschool-aged children.

Research hypotheses were as follows:

1. Harsh parental discipline will be associated with externalizing outcomes, (e.g., aggression), and internalizing outcomes, (e.g., depression and low self-esteem), in preschool-aged children.
2. Among the children who experience harsh parental discipline, boys will exhibit more

externalizing problems than girls while girls will exhibit more internalizing problems than boys.

Method

Participants

Participants included 237 three-year-old children who were part of the University of Michigan's ongoing longitudinal study of preschoolers at risk for school-age conduct problems (Olson, Sameroff, Kerr, Lopez, & Wellman, 2005). Ninety-five percent of the participating families were recruited through newspaper ads, as well as fliers left at day care centers and preschools. Additionally, other families were referred to the study via preschool teachers and pediatricians. Children who experienced chronic health problems, mental retardation, and/or pervasive developmental disorders were not part of the study. Families were paid for their participation in the study.

Participants were mainly of European American heritage (91%), while other participants included African American (5.5%), Hispanic American (2.5%), and Asian American (1%) families. Most participants (87.9%) lived in two-parent families, while 5.3% of parents lived in single-parent homes, in which the parent was never married and 6.8% of parents came from divorced homes. More than half of the mothers (55%) worked outside the home. About one-fifth of mothers (19%) and about one-fourth of fathers (24%) finished high school, but did not complete further education, 47% of mothers and 34% of fathers had finished four years of college with no additional training, and 35% of mothers and 42% of fathers had finished some type of graduate or professional training. The annual family income varied from \$20,000 to over \$100,000 with an average income of \$52,000.

Two different ads were posted in local and regional newspapers and child care centers in order to recruit families for the study. One ad centered on difficult to manage toddlers, and the other ad centered on normally developing toddlers. Therefore, children represented the full range of externalizing symptom severity, which resulted in an oversampling of children in the medium to high range of the Externalizing Problems Scale, ($T > 60$, 44%), on the Child Behavior Checklist/2-3 (Achenbach, 1992).

Procedure

Female social workers interviewed mothers in the home during which basic demographic information was gathered and mother's answered questions regarding their child's behavioral adjustment, including discipline strategies used by both parents in response to child misbehavior (Olson et al., 2005). Following the home interview, mothers filled out questionnaires regarding the child's behavioral adjustment and temperament. In return, they received gift certificates for their participation. In addition, children also received small gifts in exchange for their participation in a laboratory session in order to measure skills such as effortful control and cognitive competence.

Measures

Child Behavior Checklist

Mother's filled out the Child Behavior Checklist (CBCL/2-3) (Achenbach, 1992), which is a measure of toddler's behavioral and emotional problems. Mothers answered questions in order to rate their child on items that depict the child's behavior for the previous two months until the present time. There are ninety-nine items that are scored on a 3-point scale ranging from 2 = very true or often true of the child, 1 = somewhat or sometimes true, and 0 = not true of the child. Internalizing behavior (25 items on subscales Anxious/Depressed and Withdrawn) and

Externalizing behavior (26 items on subscales Aggressive Behavior and Destructive Behavior) are two dimensions of child problem behavior that were derived from the questionnaire.

Parenting Dimensions Inventory

In addition, mothers filled out the Parenting Dimensions Inventory (PDI; Power, Kobayashi-Winata, & Kelly, 1988). During the interview conducted by the social worker, mothers explained how often during the past three months that they and their husband had administered harsh physical discipline on their child (e.g., spank, grab, and/or shake) (Dodge, Petit, & Bates, 1994). Answers ranged from never (0), once/month (1), once/week (2), daily (3), and several times daily (4). A rank-order scale, comprised of thirty-six rankings, was established based on how often the mother claimed that her child received harsh physical punishment from either parent. For example, children who were not physically punished by either parent received the lowest rank; children who were physically punished once per month by one parent and were not physically punished by the other parent received the next lowest rank. Furthermore, the highest rank was assigned to children who were physically punished by both parents many times a day. The scores of Warm Responsiveness and Punitive Discipline were created from the scale. The Nurturance and Responsiveness subscales were averaged to form the total score of the Warm Responsiveness scale. For Punitive Discipline, the Physical Punishment scale summarizes the total number of approval of spanking and hitting in parents' response to five hypothetical situations involving child misbehavior. This scale was made (additive sum) with the interview-based measure of punitive discipline in order to create a total score (Olson et al., 2005).

Results

Descriptive Statistics and Analysis Plan

Means, standard deviations, and skewness for measures of corporal punishment, internalizing scores, and externalizing scores are shown in Table 1. Two of the variables, corporal punishment and internalizing scores, were highly positively skewed. Logarithmic transformation was not sufficient to normalize these measures. Therefore, Spearman correlations and Wilcoxon rank-sum tests were used. These nonparametric tests were appropriate because they do not assume normality and the measure of corporal punishment was a rank scale.

Descriptive Statistics by Gender Differences

Descriptive statistics and Wilcoxon rank-sum tests by gender are presented in Table 2. Boys experienced significantly more corporal punishment than girls. There were no significant gender differences in internalizing or externalizing scores.

Correlations between child problem behavior and parental punishment

Correlations between measures of child externalizing and internalizing problems and parental corporal punishment are shown in Table 3. Externalizing and internalizing scores were significantly positively correlated. As hypothesized, corporal punishment was significantly positively correlated with both measures of child problem behavior.

Correlations by Gender

Correlations were computed separately for girls and boys as shown in Table 4. Internalizing scores were significantly positively correlated with corporal punishment for boys, but not for girls. The correlation for boys was significantly greater than the correlation for girls, $Z = 2.18, p = .03$. Externalizing scores were significantly positively correlated with corporal punishment for boys, but not for girls. However, the correlation for boys was not significantly greater than the correlation for girls, $Z = 1.35, p = .18$.

Discussion

This study evaluated associations between parental corporal punishment and behavior problems in preschool-aged children. The primary goal of this study was to establish whether externalizing and internalizing outcomes in preschool-aged children were linked with corporal punishment and whether the child's gender played a role in this relationship. As hypothesized, corporal punishment was significantly positively correlated with children's internalizing and externalizing problem behaviors. This finding is in agreement with those of Mulvaney and Mebert (2007) who also found corporal punishment was linked with increased internalizing behaviors during toddlerhood and with increased externalizing behavior problems both in toddlerhood and first grade. These findings illustrate that corporal punishment does in fact have harmful consequences on children's behavioral adjustment. The current findings extend this body of research by showing that parental corporal punishment is linked with behavioral maladjustment in early childhood.

The second hypothesis was that among the children who experienced harsh parental discipline, boys would exhibit more externalizing problems than girls while girls would exhibit more internalizing problems than boys. This hypothesis was not supported by our findings. Associations between corporal punishment and externalizing problems did not differ significantly between boys and girls. However, internalizing problems were significantly positively correlated with corporal punishment for boys, but not for girls. These findings may relate to the fact that boys experience more corporal punishment than girls (Giles-Sims, Straus, & Sugarman, 1995), thus increasing the likelihood of negative outcomes. Furthermore, several studies have found that boys experience a higher level of punishment from their fathers than girls experience (Bender et al., 2007; Bryan & Freed, 1982; Harper et al., 2006). Ruble and Martin (1998) believe that boys receive corporal punishment more frequently because boys engage in

behaviors that bring forth corporal punishment (e.g., aggression) more than girls and because parents have gender-based thoughts and expectations about their children. Since boys tend to be more aggressive than girls (Tiet, Wasserman, Loeber, McReynolds & Miller, 2001), parents may administer spanking more frequently and perhaps as a result internalizing factors tends to increase. However, most prior research conducted on the topic of internalizing and externalizing outcomes related to corporal punishment has focused on children in general (Bender et al., 2007; Bryan & Freed, 2007; Harper et al., 2006; Mulvaney & Mebert, 2007; Turner & Finkelhor, 1996). Pending further research, these data suggest that three-year-old boys receive higher levels of physical punishment than girls, and are differently vulnerable to early problems with anxiety and mood regulation.

Today, corporal punishment continues to be a common child rearing practice in the United States (Gershoff, 2008). Therefore, it is important to further conduct research on the relationship between corporal punishment on preschool-school aged children and externalizing and internalizing outcomes to further demonstrate the negative effects. Evidence shows that corporal punishment actually increases children's aggression and antisocial behavior because this type of behavior models the use of force to accomplish a goal (Bandura & Walters, 1959). Furthermore, prior research indicates that physical punishment does not endorse long-term, internalized compliance and as a result, alternate forms of discipline should be used (Gershoff & Bitensky, 2007). These findings strongly support the need for early intervention efforts.

Several studies have shown that targeted intervention can decrease the use of harsh discipline (Gershoff, 2007; Sanders, Markie-Dadds, & Turner, 2002). Intervention efforts should be aimed towards families that may be at a higher risk for using corporal punishment. These families may include low-income families and those in which a child is temperamentally

difficult. These types of programs have the potential for broadly decreasing the children's noncompliant and aggressive behavior as well as promoting their overall mental health (Mulvaney & Mebert, 2007). Since several mothers seek advice on child rearing practices, pediatricians and other professionals to whom parents seek advice from should know that the evidence linking corporal punishment with behavior problems in children is increasing and that there is ample evidence for negative outcomes linked with corporal punishment (Mulvaney & Mebert, 2007). Educating parents about positive, less harmful forms of discipline could help keep children from becoming even more aggressive adolescents (Sheehan & Watson, 2008). Just as Sweden did, universal campaigns are needed to educate the public about the negative effects of corporal punishment. The campaign should consist of messages that encourage parents to think twice about using corporal punishment, should present children's perspectives on the issue, should consist of messages and materials created by and for specific racial, ethnic-cultural, religious, or socioeconomic groups that have favored corporal punishment in the past, and should promote positive discipline (Gershoff & Bitensky, 2007).

Limitations

There were several limitations to the generalizability of our findings (Olson et al., 2005). Most children came from two-parent, middle-class families and as a result cannot generalize to children growing up in other types of families or those who come from families with low socioeconomic status. In addition, over 90% of those in the study were from European American backgrounds, and therefore the findings have limited generalizability to racially and ethnically diverse populations of young children.

Another limitation was that measures of behavioral and emotional problems and the degree of harsh parental discipline administered by parents were taken solely from maternal

report. Therefore, the results may have been biased without input from fathers. In addition, mothers may have withheld information about their child's behavioral adjustment and temperament, as well as how often they used corporal punishment.

A third limitation concerned the time frame of the Parenting Dimensions Inventory. Mothers were asked to explain how often during the past three months that they and their husband had used harsh physical discipline on their child. However, some children not spanked in the past three months may have been spanked prior to this time. In addition, underreporting may be a result of the lack of a clear definition of spanking behavior (Giles-Sims et al., 1995). As Gershoff (2002) explains, several states vary on the definition of spanking. Furthermore, there is no consensus on where to draw the line between acceptable corporal punishment and dangerous physical abuse in the United States (Gershoff, 2002).

Future Directions

Several studies currently focus solely on harsh physical discipline on school-aged children and how it later impacts them during adolescence (Swinford, DeMaris, Cernkovich, & Giordano, 2000; Rodriguez, 2003; Stouthamer-Loeber, Loeber, Homish, & Wei, 2001). However, research must also focus on the possible interaction between harsh punishment and gender, and how this interaction relates to psychopathology in preschool-aged children. Since 94% of toddlers have experienced some form of parental physical discipline (Straus, 2001), it is crucial to conduct studies involving preschoolers.

In addition, studies should not only use mother reports, but reports from fathers, teachers, and other caretakers. Studies should also examine the parent's gender and whether the parent's gender influences a child's internalizing and externalizing outcomes. Although research has been done on associations between corporal punishment and race/ethnicity (Christie-Mizell et al.,

2008; Grogan-Kaylor & Otis, 2007) and socioeconomic status (Giles-Sims et al., 1995), little has been done to focus on the child's gender. Therefore, further studies are needed in order to clarify these relationships.

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Table 1

Descriptive statistics

	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Skewness</i>
CBCL externalizing subscale, mother report	235	11.52	7.31	.83
CBCL internalizing subscale, mother report	235	6.54	4.79	1.21
Mom report rank order frequency of physical punishment	237	6.30	6.85	1.51

Tale 2

Descriptive statistics by gender

	<i>Boys</i>			<i>Girls</i>			<i>Z</i>	<i>P</i>
	<i>M</i>	<i>SD</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>N</i>		
CBCL Externalizing subscale, mother report	11.84	7.37	122	11.17	7.27	113	.83	.41
CBCL Internalizing subscale, mother report	6.45	4.74	122	6.63	4.86	113	.14	.89
Mom report rank order frequency of physical punishment	7.30	7.58	112	5.23	5.82	115	2.21	.03

Table 3

Spearman correlations between child problem behavior and parental punishment

	1	2	3
1. CBCL Externalizing subscale, mother report	--	--	--
2. CBCL Internalizing subscale, mother report	.73***	--	--
3. Mom report rank order frequency of physical punishment	.22**	.15*	--

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Table 4

Spearman correlations by gender

	<i>1</i>	<i>2</i>	<i>3</i>
1. CBCL Externalizing subscale, mother report	--	.70***	.29**
2. CBCL Internalizing subscale, mother report	.76***	--	.29**
3. Mom report rank order frequency of physical punishment	.12	.01	--

Note: * $p < .05$, ** $p < .01$, *** $p < .001$. Boys above diagonal, girls below diagonal