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## The Strength of the Causal Evidence Against Physical Punishment of Children and Its Implications for Parents, Psychologists, and Policymakers

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### Abstract

The question of whether physical punishment is helpful or harmful to the development of children has been subject to hundreds of research studies over the past several decades. Yet whether causal conclusions can be drawn from this largely nonexperimental research and whether the conclusions generalize across contexts are issues that remain unresolved. In this article, the authors summarize the extent to which the empirical research on physical punishment meets accepted criteria for causal inference. They then review research demonstrating that physical punishment is linked with the same harms to children as is physical abuse and summarize the extant research that finds links between physical punishment and detrimental outcomes for children are consistent across cultural, family, and neighborhood contexts. The strength and consistency of the links between physical punishment and detrimental child outcomes lead the authors to recommend that parents should avoid physical punishment, psychologists should advise and advocate against it, and policymakers should develop means of educating the public about the harms of and alternatives to physical punishment.

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## Keywords

physical punishment; spanking; discipline; parenting; causality

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When experimental studies are not feasible or ethical, when are alternative research approaches sufficient to conclude that a causal relation between variables exists? At what point can that evidence be used to inform individuals, psychologists, and even public policy? These fundamental questions are illustrated in the controversy over the physical punishment of children. *Physical punishment* refers to the use of physical force to cause a child to experience some degree of pain or discomfort with the intention of modifying the child's behavior (United Nations Committee on the Rights of the Child, 2007). Spanking is the most common form of physical punishment and typically involves an adult striking a child on the bottom with an open hand. Decades of research have consistently linked physical punishment with risks of harm to children (Gershoff & Grogan-Kaylor, 2016a), yet over 80% of American parents continue to spank their children (Gershoff, Lansford, Sexton, Davis-Kean, & Sameroff, 2012).

Why do parents persist in a behavior that may increase the risk of harm to their children? A primary reason is that they believe it to be effective at improving child behavior and are unaware of its potential harms to children (Holden, Miller, & Harris, 1999), in part because they themselves were spanked as children and believe that they "turned out OK." These beliefs are not often challenged by the media, which typically frames stories about spanking as a "debate" among researchers without adequately vetting the strength of the evidence (e.g., Moyer, 2016). It is also the case that not all psychologists refute the notion that spanking is ineffective and inadvisable. In a 2016 survey of 843 members of the American Psychological Association (APA), the majority of these psychologists agreed that spanking children was harmful and would not recommend it to parents, yet substantial minorities held favorable views. For example, nearly 30% of survey respondents did not agree that spanking is harmful to children, 28% did not agree that spanking is a form of violence against children, 17% did not agree that spanking is a bad disciplinary technique, 14% said they advise parents with whom they work to spank with a hand occasionally, and 15% to 36% were unsure whether research has linked spanking with particular negative outcomes (Miller-Perrin & Rush, 2018). There are also a few psychologists who argue that, because experiments of spanking are, for the most part, not possible, we can never definitively conclude that spanking causes harm to children (Larzelere, Gunnoe, Roberts, & Ferguson, 2017). In short, there remains an information gap between what researchers in psychology, medicine, and other disciplines have confirmed about the harms linked to spanking and what the majority of parents and a substantial minority of psychologists continue to believe.

The goal of this article is to fill the information gap by directly addressing critiques about whether the relevant research warrants causal conclusions and to thereby illustrate a case in which a large body of largely nonexperimental research can, when taken together, support causal inference. This article developed out of a 2016 report from the Task Force on Physical Punishment of Children created by APA Divisions 7 (Developmental Psychology) and 37 (Society for Child and Family Policy and Practice). The Task Force (active 2013–2016) was

charged with summarizing the literature on spanking and physical punishment, in part to inform APA's Council of Representatives as it decides whether to approve a resolution opposing all physical punishment of children, including that by parents. As of early 2018, APA had yet to consider such a resolution.

## What Is the Evidence About Causality Regarding Physical Punishment?

Ethical concerns have meant that very few studies have examined physical punishment with experimental designs: Researchers cannot randomly assign children to "hit" and "no hit" conditions, nor can they randomly assign parents at the birth of their child to use physical punishment or not. The fact that the body of research on physical punishment is largely correlational leads to two key challenges to causal conclusions. The first is the classic "chicken or egg" problem: Are children's behavior problems the consequence or the cause of physical punishment? Some critics of the physical punishment literature have termed this "intervention selection bias": Individuals who most need a treatment are the ones most likely to get it, and consequently the intervention can be linked with more problems, at least initially (Larzelere, Kuhn, & Johnson, 2004). It is true that children with behavior problems elicit more physical punishment from their parents over time (Gershoff et al., 2012), and so research that measures physical punishment months or years before the child outcomes is key to establishing causality.

A second potential problem with physical punishment research is selection bias, which is the possibility that links between physical punishment and child outcomes are determined in part by parent or child characteristics that predict whether parents use, or in the terminology of economists "select into," physical punishment (Duncan, Magnuson, & Ludwig, 2004). This possibility is often referred to as the "third variable" explanation—other variables, such as the parent's level of warmth, may predict both the amount of physical punishment and the level of the child outcome in question, and it is this third variable that may account for the association between them.

To guide our review of research on physical punishment, we relied in part on Sir Austin Bradford Hill's (1965) classic criteria that have been used to establish causal connections such as those between smoking and lung cancer and between certain occupational hazards and pulmonary disease (Fedak, Bernal, Capshaw, & Gross, 2015). We used seven of Hill's criteria (two of his criteria are not necessary for causality, namely, his criteria of specificity of effects and of analogy) and combined them with the three criteria identified by Shadish, Cook, and Campbell (2001) into five criteria for establishing causal relations between a predictor and an outcome (Hill's criteria are italicized): (a) the hypothesized causal pathway must be *plausible* and have *coherence* with existing facts about the predictor and the outcome; (b) the behavior must be *strongly* and *consistently* correlated with the outcome of interest; (c) the behavior must *temporally precede* the outcome; (d) a *gradient* in the association between the predictor and the outcome is observed; and (e) *experiments* or statistical methods establish that the association between the two cannot be attributed to spurious factors. We will summarize relevant research on physical punishment for each criterion.

## Plausibility and Coherence

Hill (1965) observed that it would be “helpful” if the hypothesized causal pathway is plausible and that the observed data are coherent with what is generally known about the predictor and outcome. The hypothesis that parents’ use of physical punishment should affect children’s behavior is plausible and indeed widely accepted: Parents use physical punishment under the working hypothesis that their action (physical punishment) will cause a reaction (change in behavior) in the child. However, there is less agreement about the valence of the effect. Parents’ beliefs about effective parenting, their own histories with physical punishment, and their cultural milieu lead many parents to assume that physical punishment will yield positive changes in the child. Yet if we accept as plausible that parents’ use of physical punishment can affect children’s behavior at all, we must be willing to accept that any effects could be positive, negative, or neutral. As Hill noted, just because a hypothesis goes against common knowledge does not mean we should dismiss it.

Research on physical punishment is coherent with the hypothesis that it predicts detrimental outcomes for children. Decades of correlational research have linked more physical punishment with more problematic behavior in children (Gershoff, 2002; Gershoff & Grogan-Kaylor, 2016a). Physical punishment is a form of hitting (Gershoff, 2013), and given that other forms of hitting are already acknowledged as harmful to children (bullying; American Psychological Association [APA], 2004) and adults (violence between romantic partners; APA, 1999), the hypothesis that physical punishment should predict detrimental outcomes for children is consistent with our society’s beliefs about the negative outcomes that can be attributed to hitting.

## Strength and Consistency

Hill (1965) urged researchers to judge the *strength* of potential causal relations; the direction of the association is of course also important to assess. For years, the field judged strength of effect sizes, which statistically characterize the association between two variables, according to criteria for small, medium, and large effect sizes suggested by J. Cohen (1988) in his writings on power analysis. Yet on their own, effect sizes can be large but not practically significant, as in the case of studies with small samples and large standard errors. Confidence intervals (CIs) around effect sizes are needed, as they help researchers establish the amount of error in the effect size and indicate whether an effect size is statistically different from zero.

Meta-analysis is an ideal tool for determining the general strength and direction of the associations between key variables. We can obtain an overall sense of the strength, direction, and consistency of the associations between physical punishment and child outcomes through the findings of five meta-analytic reviews: Gershoff (2002; 88 studies), Paolucci and Violato (2004; 70 studies), Larzelere and Kuhn (2005; 26 studies), Ferguson (2013; 45 studies), and Gershoff and Grogan-Kaylor (2016a; 75 studies). There is some, but not entire, overlap across the meta-analyses in the studies used; for example, the most recent meta-analysis (Gershoff & Grogan-Kaylor, 2016a) used 26% of the studies used in Gershoff, 23% of the studies in Paolucci and Violato, 42% of the studies in Larzelere and Kuhn, and 24% of the studies in Ferguson. The Gershoff and Grogan-Kaylor meta-analysis reported a mean

effect size of  $d = .33$  (95% CI [.29, .38]) that characterized all 111 effect sizes and the 160,927 unique children represented by those effect sizes. The strength of the association between physical punishment and child outcomes is statistically significant and moderate in strength.

When the direction of the associations is considered, spanking has been significantly correlated with the following child outcomes, almost all in a detrimental direction: lower long-term compliance (Gershoff, 2002; Gershoff & Grogan-Kaylor, 2016a); more aggression (Gershoff, 2002; Gershoff & Grogan-Kaylor, 2016a; Larzelere & Kuhn, 2005); more behavior problems (Ferguson, 2013; Gershoff, 2002; Gershoff & Grogan-Kaylor, 2016a), but not in Larzelere and Kuhn (2005); more mental health problems (Ferguson, 2013; Gershoff, 2002; Gershoff & Grogan-Kaylor, 2016a); lower cognitive performance (Ferguson, 2013; Gershoff & Grogan-Kaylor, 2016a); lower parent-child relationship quality (Gershoff, 2002; Gershoff & Grogan-Kaylor, 2016a); and higher risk for physical injury or abuse (Gershoff, 2002; Gershoff & Grogan-Kaylor, 2016a). Research on immediate compliance has been equivocal. Physical punishment was associated with higher rates of immediate compliance in two meta-analyses (Gershoff, 2002; Larzelere & Kuhn, 2005); however, when Gershoff and Grogan-Kaylor (2016a) reanalyzed these studies to take into account differences in initial rates of compliance between the spanked and nonspanked groups, the association was no longer statistically significant.

It is one thing to know that physical punishment is, on average, associated with detrimental child outcomes; it is another to know that this association is *consistent* across dozens or hundreds of examinations of it. Hill (1965) encouraged researchers to consider the question, “Has it been repeatedly observed by different persons, in different places, circumstances and times?” (p. 296). In other words, the strength and direction of the finding must be replicated across studies but also across a range of populations, locations, and cohorts.

The research on physical punishment demonstrates both aspects of consistency. Physical punishment has been linked with detrimental child outcomes consistently *across studies*. In the most recent meta-analysis, a total of 79 of all the effect sizes (71%) were statistically significant, and 99% (all but one) were in the direction of an unfavorable outcome (Gershoff & Grogan-Kaylor, 2016a). In other words, just under three quarters of all effect sizes were statistically significant and indicated physical punishment was associated with detrimental child outcomes. Links between physical punishment and problematic child outcomes have also shown consistency *across samples*. Using meta-regression, Gershoff and Grogan-Kaylor (2016a) found that spanking was linked with detrimental outcomes to the same extent in the United States and in countries other than the United States (13 countries, constituting 30% of studies). In a group of studies that included cohorts of children from the 1950s through the 2000s, they also found that the mean effect size was robust to the age of the children and to the operationalizations of spanking (e.g., ever; in last week). The literature on physical punishment is thus characterized by a remarkable level of consistency across studies, populations, settings, and cohorts.

## Temporal Precedence

The best way to ensure that physical punishment precedes child outcomes in a statistical model is through a longitudinal design in which spanking is used to predict subsequent child outcomes. Although longitudinal designs meet the temporal precedence criterion, they do not necessarily address selection bias. A particularly important selection factor, as mentioned earlier, is a child effect of children's initial behavior: Children's difficult behaviors could elicit physical punishment from their caregivers. If the "true" association between physical punishment and child outcomes is either entirely or partially a child effect, an association between physical punishment and child outcomes could be mistakenly viewed as a parent effect. With this selection concern in mind, nine longitudinal studies have controlled for children's initial behavior problems. All of these studies determined that parents' use of physical punishment predicted increases in children's externalizing behavior problems over time, even after race, gender, and family socioeconomic status had been statistically controlled (e.g., Grogan-Kaylor, 2005; Larzelere, Cox, & Smith, 2010; Olson, Lopez-Duran, Lunkenheimer, Chang, & Sameroff, 2011).

Even stronger are research designs that model both the longitudinal parent effect (physical punishment to child behavior) and the longitudinal child effect (child behavior eliciting more physical punishment) simultaneously, such that each statistically controls for the other; these are known as cross-lagged panel designs. Using this design, spanking at an initial time point predicted increases in behavior problems from Ages 1 to 3 (Berlin et al., 2009), 3 to 5 (Maguire-Jack, Gromoske, & Berger, 2012), 5 to 8 (Gershoff et al., 2012), and 12 to 14 as well as 14 to 16 (Wang & Kenny, 2014). Three of these four studies used large and nationally representative samples ( $N = 2,573$ : Berlin et al., 2009;  $N = 11,044$ : Gershoff et al., 2012;  $N = 3,870$ : Maguire-Jack et al., 2012).

These three approaches to determining temporal order effects generally find that spanking predicts a worsening of child behavior over time, with only a few exceptions that find no relation between spanking and changes in child behavior (e.g., Lansford, Wager, Bates, Pettit, & Dodge, 2012). It is important to note that in none of the cross-lagged studies did physical punishment predict a decrease in child problem behaviors over time while controlling for the child elicitation effect. If selection entirely explained the links between physical punishment and children's behavior, physical punishment would have significantly predicted improvements in child behavior. Longitudinal studies have overwhelmingly found that physical punishment predicts deteriorations in child behavior over time. That said, it is worth noting that in the Gershoff and Grogan-Kaylor (2016a) meta-analysis, the mean effect size for longitudinal studies was not significantly different from the mean effect size for correlational studies, indicating that both methods reached the same conclusion.

## Gradient

A gradient in the association between two variables is observed when a one-unit change in the predictor leads to a regular change in the outcome variable that is observed along the full range of the predictor variable. Hill (1965) noted that a gradient does not prove causality, but it does strongly suggest researchers should look for a cause. In medicine, a gradient is often referred to as a *dose-response relationship*, and it can be linear (which is then also called a

*step function*) or curvilinear. For example, a gradient could be illustrated by an increase in children's externalizing scores by 2 points for every additional spank per month.

Whether there is a gradient in the associations between physical punishment and child outcomes, and what form that gradient takes, is an issue that underlies one of the common arguments about physical punishment. Defenders of physical punishment (Larzelere et al., 2017) argue that the association is curvilinear, namely, that infrequent or light spankings are not thought to be harmful to children and that physical punishment is only linked with harm to children when it is frequent, harsh, or injurious. A few studies have examined the shape of the association. A study of parents in Chile (Ma, Han, Grogan-Kaylor, Delva, & Castillo, 2012) found that, compared with adolescents who were never physically punished, externalizing behavior problems were higher among adolescents who were even infrequently subjected to physical punishment. Moreover, compared with those adolescents who were subjected to infrequent physical punishment, externalizing behavior problems were significantly higher among adolescents subjected to frequent physical punishment. In this cross-sectional study, the association between frequency of physical punishment and externalizing behaviors followed a step function gradient. A second study used a causally stronger fixed effects regression method with longitudinal data to examine links between three levels of physical punishment ("never," "once," "more than once in the past week") and children's behavior problems (Grogan-Kaylor, 2004). An increase in the frequency of parents' physical punishment between Wave 1 and Wave 2 from "never" to "once in the past week" predicted the same level of increase in children's behavior problems, as did an increase from "once" to "more than once in the past week." That the association between physical punishment and children's behavior problems followed a linear gradient in both studies is consistent with a causal link, such that exposure to more physical punishment leads to more behavior problems.

### Ruling Out Spurious Factors

Longitudinal designs used to examine spanking can rule out the influence of selection factors measured in the study. However, there could be unmeasured factors that account for significant associations between physical punishment and child outcomes. The ideal method for ruling out both selection factors is the randomized experiment (Duncan et al., 2004). Very few studies have examined physical punishment with experimental designs. However, there are also a few experimental evaluations of interventions and quasi-experiments that bear on the question of whether physical punishment harms children.

**Experiments.**—The extent of experimental studies is limited to a series of experiments with small samples conducted by Mark Roberts and his colleagues to examine the utility of spanking used as a "back up" when children with behavior problems leave "time out" prematurely. He concluded that spanking was effective compared with other disciplinary techniques (e.g., Roberts, 1988; Roberts & Powers, 1990). However, the spank and no-spank groups had significant differences in their levels of compliance at the start of the experiments. Once initial differences were controlled by comparing pre–post differences rather than just postexperiment differences (see Gershoff & Grogan-Kaylor, 2016a), effect

sizes were nonsignificant. There is thus no experimental evidence that spanking is more effective than other methods at securing children's immediate compliance.

There are no other traditional experiments examining spanking's direct effect on children's behaviors. However, dozens of parenting interventions have been found to reduce parents' use of physical punishment (Gershoff, Lee, & Durrant, 2017). A few studies have examined whether parenting interventions that target a reduction in physical punishment predict change in child outcomes. A randomized controlled trial (RCT) evaluation of the Incredible Years intervention for young children with behavior problems found that treatment effects were significantly mediated through a reduction in parents' use of spanking (Beauchaine, Webster-Stratton, & Reid, 2005). An analysis of data from a national RCT of the federal Head Start program showed that parents of children randomly assigned to participate in the Head Start program decreased their use of spanking more than parents in the control group, and that this reduction in spanking, in turn, predicted declines in children's aggression (Gershoff, Ansari, Purtell, & Sexton, 2016). An RCT of the Chicago Parent Program, part of which focused on African American and Latino/a parents and their preschool children, found that the intervention group reduced parents' use of physical punishment significantly more than the control group and that their children had fewer behavior problems over time (Breitenstein et al., 2012). These experimental program evaluations provide evidence that interventions can reduce child problem behavior by reducing parents' use of spanking, and in doing so provide evidence for a causal link between spanking and children's problem behavior.

**Quasi-experiments.**—When experiments are difficult to conduct, statistical methods can be employed to rule out alternative explanations and to enhance our confidence in making causal inferences. One such method is fixed effects regression, which uses difference scores to control for timeinvariant unobserved characteristics that may account for observed relations between physical punishment and child outcomes, such as children's initial levels of problem behavior. Using fixed effects regressions, Grogan-Kaylor (2005) found that parents' increased use of spanking predicted increases in children's subsequent externalizing behaviors.

A rigorous statistical method from econometrics known as *propensity score matching* has recently been applied to the issue of physical punishment with samples in the United States and Japan. Gershoff, Sattler, and Ansari (2018) used propensity score matching to create two groups of children who were matched on 38 demographic characteristics so that they varied only in whether parents reported they had ever spanked their children. The spank and no-spank groups were matched so that they were not significantly different on characteristics at the levels of the child (e.g., demographic characteristics and initial behavior problems as rated by teachers), the parent (e.g., demographic and mental health characteristics), and the family (e.g., income, language, regional location). In the models with the matched samples, children in the spanked group ( $n = 9,479$ ) were rated by teachers as having significantly more externalizing behavior problems 1 and 2 years later than children who had never been spanked ( $n = 2,479$ ); there were no differences for internalizing problems. Similarly, using a sample of more than 29,000 children, Okuzono, Fujiwara, Kato, and Kawachi (2017) found that spanked children exhibited more behavior problems after matching children on 28



variables. By ruling out many of the plausible third-variable explanations, these results give considerable confidence to the conclusion that physical punishment predicts increases in children's problem behaviors over time.

### Summary

The conclusion from this combination of meta-analyses, experiments, and quasi-experiments is that the preponderance of evidence links physical punishment with detrimental child outcomes. There is no evidence that physical punishment is effective at improving child behavior or at reducing other negative outcomes for children. The research linking physical punishment with harm to children is, with only a few exceptions, consistent and unidirectional, and it has been replicated across a range of study designs and methods, thereby increasing the validity of causal inference.

### Do Harsh or Abusive Methods Drive the Links Between Physical Punishment and Detrimental Child Outcomes?

A persistent criticism of the physical punishment research is that the associations with detrimental outcomes are driven by the inclusion of harsh and potentially abusive methods along with acceptable methods such as spanking (Larzelere et al., 2017). The underlying argument is that physical punishment may be effective and not harmful up to a certain threshold of either severity or frequency, after which it becomes harmful. If this argument were to be supported, then socially acceptable manifestations of physical punishment, such as spanking, should be linked with either benefits to children or neutral effects on children, whereas unacceptable forms, such as beating children to injury, should be associated with harm.

One way to address this criticism would be to compare children who are physically punished but not abused with children who are abused. Such a comparison would be problematic for reasons of selection bias—children who are abused may be different from nonabused children on a range of individual and family characteristics that may drive any differences in their outcomes. Children who are physically abused are also likely to be physically punished (Lee, Grogan-Kaylor, & Berger, 2014), and thus such between-subjects comparative studies cannot isolate impacts of physical punishment from impacts of physical abuse.

The solution to this problem is to use within-subjects designs in which both physical punishment and physical abuse are measured for the same children, thereby eliminating any selection bias. Gershoff and Grogan-Kaylor (2016a) identified seven studies with 10 different outcomes that reported effect sizes for links between spanking and child outcomes as well as for physically abusive methods and the same outcomes. Both spanking and physical abuse were linked with more problematic outcomes for children. The mean effect size for the link between spanking and detrimental outcomes was two thirds the magnitude of the effect size for the link between physical abuse and the same detrimental outcomes (Gershoff & Grogan-Kaylor, 2016a). A similar conclusion was reached in an analysis of data from the Adverse Childhood Experiences Survey (Afifi et al., 2017). Adults who reported having ever been spanked in childhood were more likely to have attempted suicide, to have

used street drugs, and to have had a drinking problem than adults who had not been spanked, over and above whether the adults reported having been physically or emotionally abused as children.

These findings suggest that the distinction between acceptable physical punishment and unacceptable physical abuse is largely semantic; they are linked with the same detrimental outcomes for children, just to varying degrees. Euphemisms such as “spanking” have obscured the fact that both physical punishment and physical abuse involve hitting and hurting children emotionally and physically (Brown, Holden, & Ashraf, 2018; Gershoff, 2013).

## Are the Detrimental Outcomes Linked With Physical Punishment Generalizable Across Contexts?

The third and final major concern about the research on physical punishment is that it is not generalizable across contexts (Deater-Deckard & Dodge, 1997). Some researchers have argued that physical punishment may benefit children growing up in some contexts more than children growing up in other contexts. The three main contexts that have been investigated as with regard to physical punishment are culture, parenting style, and neighborhoods.

### Culture

Within the United States, examinations of “culture” and physical punishment have tended to focus on a single cultural marker: race or ethnicity. *Race* refers to categories of individuals based on physical characteristics, whereas *ethnicity* implies the acceptance of a set of beliefs and values from a culture of origin (American Psychological Association, 2002). We acknowledge that there is wide variability both in cultures and in parenting practices within racial groups, but because race has been theoretically and empirically considered a cultural moderator of discipline effects on children, we will consider race and ethnicity to be markers of culture as well.

The discipline used in African American families has often been contrasted with that found in European American families. African Americans tend to more strongly endorse physical punishment as an appropriate and effective discipline strategy than do European Americans (Mosby, Rawls, Meehan, Mays, & Pettinari, 1999) and to spank their children more frequently than European American or Hispanic/Latino parents (e.g., Barkin, Scheindlin, Ip, Richardson, & Finch, 2007; Deater-Deckard, Dodge, Bates, & Pettit, 1996; Gershoff et al., 2012; Grogan-Kaylor & Otis, 2007). Such findings led to the development of the cultural normativeness hypothesis (Deater-Deckard & Dodge, 1997), which states that physical punishment may have less negative impact, and a potentially positive impact, when it is culturally normative because children expect and accept it when they misbehave. A few studies have indeed found that African American children who are physically punished have levels of behavior problems that are lower (Gunnoe & Mariner, 1997) or the same as (Polaha, Shapiro, Larzelere, & Pettit, 2004) European American children who are physically punished.

In contrast, other studies using data from longitudinal, nationally representative samples have not found race or ethnicity to moderate the association of physical punishment with later child behavior (Grogan-Kaylor, 2004, 2005; Lau, Litrownik, Newton, Black, & Everson, 2006; McLoyd & Smith, 2002; Mulvaney & Mebert, 2007). Three methodologically strong studies that utilized cross-lagged longitudinal models controlling for children's initial behavior along with empirical tests of moderation each found no moderation by race or ethnicity (Berlin et al., 2009; Gershoff et al., 2012; Wang & Kenny, 2014).

In addition, a meta-analysis of five studies that reported bivariate associations between spanking and child outcomes separately for White and Black children determined that the effect sizes were nearly identical for both groups ( $d = .274$  for Whites [ $n = 11,814$ ];  $d = .279$  for Blacks [ $n = 3,065$ ]) and both effect sizes were statistically different from zero (Gershoff & Grogan-Kaylor, 2016b). Taken together, these studies support a conclusion that there are few, if any, racial or ethnic group differences in the extent to which physical punishment is linked with worse child behavior.

### Parenting Style

Physical punishment is but one of many disciplinary techniques parents use and it occurs in the context of an overall parenting style. Parenting style is thought to be more influential than individual parenting behaviors and to serve as a moderator of them (Darling & Steinberg, 1993). Some researchers have thus argued that a warm or positive parenting style may buffer against any negative effects of physical punishment (Benjet & Kazdin, 2003).

This possibility has been examined in a few studies and there is some evidence that parental warmth buffers associations between physical punishment and child outcomes. Several studies have found that the link between physical punishment and negative child outcomes is stronger when parents are low in warmth or high in negativity (e.g., Aucoin, Frick, & Bodin, 2006; Deater-Deckard, Ivy, & Petrill, 2006; McKee et al., 2007). Yet other cross-sectional studies have not found maternal warmth to buffer the cross-sectional association of spanking with children's behavior problems in the United States (Stacks, Oshio, Gerard, & Roe, 2009) or in 20 different countries (Fréchette, Zoratti, & Romano, 2015).

Four studies have examined this question using longitudinal data. One study of over 11,000 children found that parental warmth did not moderate the link between spanking at Age 5 and lower math scores at Age 10 (Bodovski & Youn, 2010). An investigation using a cross-lagged panel design with 2,500 children at Ages 1, 2, and 3 found maternal warmth did not buffer the associations of spanking with increased behavior problems and lower cognitive ability (Berlin et al., 2009). In another study using a cross-lagged design with 3,200 children, greater use of spanking at Age 3 predicted an increase in aggression from Age 3 to Age 5 regardless of their mothers' level of warmth (Lee, Altschul, & Gershoff, 2013). A fourth study also used a cross-lagged design and failed to detect any evidence of moderation of parental warmth on relations between maternal or paternal physical punishment and children's behavior problems and depressive symptoms (Wang & Kenny, 2014). The fact that warmth has not been consistently found to buffer the links between physical punishment and child behavior in cross-sectional studies, and not at all in longitudinal studies, indicates

that parenting warmth is not a reliable buffer against the negative outcomes associated with physical punishment.

### **Neighborhood Quality**

There has been speculation that neighborhood contexts moderate the link between physical punishment and children's behavior problems. For families living in neighborhoods with high levels of violence, crime, and illicit activity, the consequences of child misbehavior may be serious (e.g., injury or death). Thus one possibility is that parents' use of physical punishment may be more successful at promoting positive child behavior when families reside in dangerous neighborhoods (Garbarino, Kostelny, & Barry, 1997).

There is little evidence to support this argument. First, it is not clear that the rate of physical punishment is indeed higher in violent or low-income neighborhoods. Neighborhood problems have sometimes been associated with higher rates of physical punishment (Molnar, Buka, Brennan, Holton, & Earls, 2003) but sometimes not (Grogan-Kaylor & Otis, 2007). Second, neighborhood context has not been found to be a predictable moderator of associations between physical punishment and child behavior. Although one study found that physical punishment was linked with lower child behavior problems when families lived in communities with higher levels of neighborhood problems (Eamon, 2002), this finding was refuted when reanalyzed with more sophisticated fixed effects regression methods that found physical punishment was equally deleterious for children in all neighborhoods (Grogan-Kaylor, 2005). Similarly, a large two-state study using a multilevel design found that community deviance did not moderate the association between physical punishment and children's conduct problems (Simons et al., 2002).

### **Implications of the Research on Physical Punishment**

The extensive body of empirical research on physical punishment, including some experimental and quasi-experimental studies, is quite consistent and affords a clear conclusion: Physical punishment increases the risk that children will experience detrimental outcomes and this risk is experienced equally across cultural groups, families, and neighborhoods. The consistency and strength of these findings suggest several implications for parents, psychologists, and policymakers.

#### **Implications for Parents**

Parents and the general public should be educated about the body of research indicating physical punishment is ineffective and may be harmful to children. Professional associations such as the American Academy of Pediatrics (1998, 2014), the National Association of Pediatric Nurse Practitioners (2011), the American Academy of Child and Adolescent Psychiatry (2012), and the American Professional Society on the Abuse of Children (2016) have all issued policy statements both urging parents to avoid using physical punishment and directing professionals who work with parents to advise them to discipline their children with nonphysical techniques.

Education about alternatives to physical punishment can occur in a range of contexts and at universal, selective, or indicated levels of intervention (Gershoff et al., 2017). Interventions

in pediatric health care settings have successfully reduced attitudes about or intent to use physical punishment (e.g., Canfield et al., 2015). Home visiting programs that focus on teaching nonviolent parental discipline have been successful at reducing physical punishment and preventing physical abuse (Bugental et al., 2002). Group-based interventions can also be effective at teaching alternatives to physical punishment; the Adults and Children Together against Violence educational program (<http://actagainstviolence.apa.org/>) created by APA's Violence Prevention Office teaches social problem-solving skills and nonviolent discipline and has been shown to reduce spanking and to increase positive discipline in the United States and around the world (e.g., Howe et al., 2017; Portwood, Lambert, Abrams, & Nelson, 2011).

Interventions to educate parents about physical punishment need not be intensive to be successful. New mothers in an RCT who received baby books that informed them about alternatives to physical punishment reported significantly less favorable views toward physical punishment than did mothers who received noneducational baby books or no books (Reich, Penner, Duncan, & Auger, 2012). A randomized controlled study effectively used motivational interviewing coupled with psychoeducation to change the attitudes and behavior intentions of mothers of young children (Holland & Holden, 2016). Merely presenting parents with summaries of the research on physical punishment has also been found to reduce approval of physical punishment (Holden, Brown, Baldwin, & Croft Caderao, 2014).

### **Implications for Psychologists**

The work of psychologists is guided by APA's (2010) ethics code as well as by resolutions passed by APA related to research and practice. Principle A in the ethics code concerns safeguarding the welfare and rights of others. Because physical punishment poses a harm to children's welfare, psychologists are obligated to caution parents against using physical punishment. APA was a leader in opposing physical punishment in schools when it became the first professional organization in the United States to pass a resolution opposing school paddling (APA, 1975). That resolution was largely based on research on parents' use of physical punishment because there was no research then on the effects of school physical punishment on children. Out of over 800 APA members in a recent survey, 59% were in favor of an APA resolution opposing any use of spanking or physical punishment by parents or caregivers (Miller-Perrin & Rush, 2018). APA should take a stand against physical punishment and work to educate its members and the public about the harms of physical punishment and about the benefits of alternative positive forms of discipline.

### **Implications for Policymakers**

Children are the only group of American citizens who can be legally subjected to physical punishment. Physical punishment of adults was banned from all prisons and military training facilities in the United States decades ago (Block, 1997). Physical punishment has been banned from public schools in 31 states (Gershoff & Font, 2016) and from child care centers, residential treatment facilities, and juvenile detention facilities in most states (Bitensky, 2006). At the federal level, the notion that parents have a right to discipline their children as they see fit reflects a historical perspective that children are the property of their

parents (Pollard, 2003). Whether parents have a fundamental constitutional right to use physical punishment, or children have the right to be protected from it, has not been brought before the United States Supreme Court (Pollard, 2003).

The committee that monitors compliance with the United Nations Convention on the Rights of the Child (1989) has declared that physical punishment is a form of “legalized violence against children” (United Nations Committee on the Rights of the Child, 2007, para. 18). The Committee stressed that all physical punishment of children, including that in homes, should be eliminated through “legislative, administrative, social and educational measures” (United Nations Committee on the Rights of the Child, 2007, para. 18). As of 2018, 53 countries, including most of Europe and South America, have banned all physical punishment of children (Global Initiative to End All Corporal Punishment of Children, 2018).

The United States is the only country in the world that has not ratified the Convention on the Rights of the Child. The United States’ failure to do so rests in part on some critics’ objection to what they consider to be governmental interference in parenting (Wilkins, Becker, Harris, & Thayer, 2003). A legal ban would be a clear example of government regulating family life, and thus the prospects of a ban in the United States are unlikely at present. In a survey of adults in the State of New York 10 years ago, a majority (64%) were opposed to legislation that would ban parents from using physical punishment (SurveyUSA, 2007). Yet there are many policy strategies short of a legal ban that could be used to reduce parents’ use of physical punishment in the United States. One prime example would be educational efforts that target societal attitudes about physical punishment as a means of reducing its use. In their review of primary prevention strategies to prevent child abuse, Klevens and Whitaker (2007) importantly recognized that “social norms regarding physical discipline may be the most prevalent risk factor for child abuse in the United States” (p. 371). Changing norms about physical punishment can lead to reductions in risk at the family level that will accumulate to improve overall public health (D. A. Cohen, Scribner, & Farley, 2000).

## Conclusion

This article summarized three key conclusions about spanking and physical punishment that bear on psychologists’ views about it: (a) Research on physical punishment has met the requirements for causal conclusions, despite there being few true experiments; (b) Research on spanking and physical punishment is highly consistent in showing links to detrimental child outcomes for children; (c) Spanking and physical punishment are linked with the same harms to children as physical abuse; (d) Spanking and physical punishment have been linked with harm to children across multiple contexts; (e) Spanking and physical punishment are disavowed by a number of professional organizations outside psychology; and (e) Human rights organizations and 53 countries agree that spanking and physical punishment are forms of violence that infringe on children’s human rights. The message to parents, psychologists, and policymakers is clear—it is time to end the debate about physical punishment and to end this outdated parenting practice.

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