Exploring Attitude Change Toward Corporal Punishment: The Role of Cognitive Dissonance

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Author Note

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Abstract

While 93% of parents self-report spanking their child at least once (Lansford, Wager, Bates, Pettit, & Dodge, 2012), research on disciplinary practices reveals no benefits and many risks associated with spanking (e.g., Gershoff, 2002). In order to understand the discrepancy between parenting practice and scientific research, I explore testing cognitive dissonance in a novel context – understanding neurophysiological determinants of attitude change toward spanking. Specifically, I measured cognitive dissonance elicited from exposure to research on the harms of spanking through typical cognitive dissonance testing (i.e., measuring participant attitudes after exposure to either scientific evidence or a control condition), as well as utilizing the neuropsychological measure of FaceReader software. Additionally, I analyzed participants written responses to questions assessing their attitudes toward spanking using Linguistic Inquiry Word Count Software. Results revealed that after exposure to research on the dangers of spanking, participants who reported spanking their children rated spanking as less favorable ($F(1, 167)=6.220$, $p=.014$) compared to those who were exposed to a control condition. While not in line with hypotheses, these results are encouraging and suggest that education-based interventions may be effective in producing short-term attitude change.

Exploring Attitude Change Toward Corporal Punishment: The Role of Cognitive Dissonance

Despite numerous empirical studies revealing that spanking (i.e., hitting a child as a form of punishment) is harmful to children (for a review, see Gershoff, 2008), most parents in the U.S. continue to consider spanking as an appropriate form of punishment for children (e.g., Robinson, Funk, Beth, & Bush, 2005). Although parents also use tactics such as diversion, reasoning, and negotiation, spanking is still prevalent; 59% of mothers self-report spanking their child on average once a week (Vittrup, Holden, & Buck, 2006), and 93% of parents claim to have spanked their child at least once (Lansford, Wager, Bates, Pettit, & Dodge, 2012). Although spanking toddlers is most common, spanking infants is also commonplace; parents report an increased likelihood to spank when their infant is perceived as more "difficult," or when the parent endorses fewer alternatives to spanking generally (Combs-Orme & Cain, 2008).

However, at best, research shows that spanking (i.e., corporal punishment) is not any more effective than other disciplinary measures, and at worst, spanking is correlated with negative behaviors and adverse development among children, including increased aggressive and noncompliant acts (e.g., Lansford et al., 2012) – ironically, the very behaviors that parents aim to reduce. Spanking is also significantly associated with other negative consequences for children, including mental health problems, delinquency and criminal behavior, behavioral problems in school, the development of negative and unhealthy relationships between the parent and child, and domestic violence in adulthood (e.g., Slade & Wissow, 2004; for a review, see Gershoff, 2013). Although such research is largely (understandably) correlational in nature, and therefore is limited with respect to causal implications, some experimental research corroborates the negative impact of spanking on children (e.g. Gershoff, 2002; Bender et al., 2007), while simultaneously providing evidence of causality.

Because spanking has myriad implications for public health and society generally, it is vital that we understand attitudes toward and determinants of spanking, which logically must precede effective interventions designed to curb spanking, broadly. Of course, many factors contribute to a parent's likelihood to spank, including, for instance, socialization within a culture and society that frames spanking as normative (e.g., Fontes, 2005). Indeed, being spanked as a child is a strong predictor of spanking children as a parent (e.g., Ateah, 2003; Walsh, 2002). In fact, one study surveyed children that were 3-7 years old, and researchers found that children were more likely to support hitting others as a conflict resolution strategy when they themselves were spanked as children, in turn, providing further evidence for the intergeneration cycle of corporal punishment (Simons & Wurtele, 2010). These findings are also consistent with those of Holden and Zambarano (1992), who found that children who were often spanked were more likely than those who were not spanked to suggest spanking as a punishment when presented with hypothetical vignettes. These studies suggest that spanking behavior may largely stem from the parent's own experiences with their parents, indicating that beliefs about the effectiveness of spanking are deeply rooted (Holden & Zambarano, 1992).

In the present research, I explore cognitive dissonance theory in a novel context -- specifically attitude change toward spanking. The present research has implications for understanding why parents continue to spank their children despite evidence that spanking is harmful (e.g., Walsh, 2002). I turn next to a brief review of cognitive dissonance theory, followed by an application of this research and theory specifically to understanding parent reluctance to be persuaded by myriad research regarding the negative consequences of spanking.

Cognitive Dissonance

Cognitive dissonance results from inconsistencies in an individual's thoughts or actions, which create an aversive emotional state known as dissonance – a negative psychological state that individuals are motivated to eliminate (Kenworthy, Miller, Collins, Read, & Earleywine, 2011). Cognitive dissonance can be aroused in an individual when new information conflicts with their current behaviors and beliefs (Bradshaw & Borchers, 2000). In the context of parenting, for instance, a state of cognitive dissonance might be induced when a parent who spanks her child encounters scientific evidence that spanking is harmful to children. In order to reduce a perceived discrepancy between one's behaviors and newly encountered evidence, one may select various dissonance-reduction strategies. For instance, a person could change his or her behavior (e.g., stop spanking), as a strategy to eliminate uncomfortable cognitive dissonance. Alternatively (if behavioral change is too difficult or impossible), one could alter the attitude least resistant to change, which could reflect changing previously held convictions (Harmon-Jones 2002), interpreting the new information encountered in a biased way, or rejecting the new information that is inconsistent with their current beliefs (Bradshaw & Borchers 2000; Kenworthy et al., 2011).

A good deal of cognitive dissonance research has explored attitude change toward smoking, which can be applied to attitude change toward spanking. The realization that one's actions (i.e., smoking) are dangerous to one's health is likely to evoke dissonance, which could either trigger behavioral change (i.e., quitting smoking), or if behavioral change is impossible (i.e., addiction is too strong), will elicit a rejection of the scientific research connecting smoking with disease (Gibbons, Eggleston, & Benthin, 1997). By rejecting the scientific information, individuals who had failed at successful smoking cessation were able to restore internal

consonance (Gibbons et al., 1997). In one study, participants were given the option of pressing a button to reduce static sound that was interfering with an informational message regarding links to smoking and lung cancer. Participants who currently smoked pressed the button fewer times when the information confirmed the link to health problems (allowing the static to continue), but pressed it more times (eliminating the static) when the information was disproving the link and therefore confirming their current actions as acceptable, which suggests that dissonance results in information selectivity or bias (Brock & Balloun, 1967). In another study, researchers found that smokers, compared to non-smokers, tended to consider evidence that smoking lead to lung cancer as less convincing (Feather, 1963).

Haidt (2001) also proposes that moral decision-making may elicit a cognitive dissonance response as a defense for one's own view of the world. This theoretical prediction is strengthened by the idea that defensive motivations should increase if a person has just expressed their stance on an issue and is then given information that opposes their personal stance (Hart, Albarracín, Eagly, Brechan, Lindberg, & Merrill, 2009). In a meta-analysis on information preferences, results indicated that individuals given opposing information from their recently expressed personal stances were more likely to subsequently choose to view information that aligned with their personal stance, indicating a need to reduce cognitive dissonance (Hart et al., 2009). This need to reduce cognitive dissonance is often attributed to a motivation to alleviate discomfort, but other research suggests that this discomfort can be more aptly categorized as guilt, given that guilt predicted the effect sizes associated with dissonance reduction behavior (Kenworthy et al., 2011). Interestingly, a growing body of research has begun to delineate the neuropsychological underpinnings of the state of cognitive dissonance, which I turn to next.

Neuropsychological Measures of Cognitive Dissonance

Research reveals myriad neurophysiological responses that are associated with states of cognitive dissonance aroused by perceived attitude-behavior inconsistencies, including a startle response (i.e., startle eye blink; Hajack & Foti, 2008; Harmon-Jones, Amodio, Harmon-Jones, 2009), negative affect and heightened electrodermal sympathetic activation response (Harmon-Jones et al., 2009), and heightened heart rate (Etgen & Rosen, 1993). In addition, during experiences of cognitive dissonance, the reasoning area of the brain (i.e., the left frontal lobe) virtually shuts down, and the anterior cingulate cortex shows evidence of heightened brain activity (Harmon-Jones et al., 2009, see also Westen, Blagov, Harenski, Klits, & Hamann, 2006) – a part of the limbic system involved in emotional responses. When cognitive dissonance is alleviated and consonance is restored, the emotion circuits of the brain associated with reward are activated (i.e., orbitofrontal cortex, striatum, nucleus accumbens; Westen et al., 2006). Importantly, these findings stress that a cognitive dissonance response is illogical and relies on emotional processing, which makes the implications of the current research even more pertinent in shaping effective interventions for reducing spanking use.

In the present research, I randomly assign parents to either read about scientific evidence that spanking is harmful or to read a control condition essay of the same length, but unrelated to spanking. I subsequently measure their attitudes toward spanking. I expect that parents who spank their children (but not parents who do not spank) will, ironically, indicate greater support for spanking after encountering scientific evidence that spanking is maladaptive, relative to a control condition who does not encounter said evidence. Not only do I expect to find evidence that parents who spank will "double-down" with respect to support for spanking after encountering scientific evidence condemning spanking, but I also expect to find

neuropsychological evidence of psychological distress among such parents when they encounter the dissonant information (i.e., scientific evidence that spanking is harmful). Finally, I expect that the neuropsychological indicators of distress will mediate the effect of scientific evidence (i.e., dissonant information) on attitudinal change (i.e., increased support for spanking).

Method

Participants

Participants consisted of 168 community members (31% Male; Mean Age= 34, SD= 8.49; 76.2% White) who are U.S. citizens, 18 or older, and parents, recruited through Qualtrics —an online research portal that allows for the creation and dissemination of surveys to a pool of nation-wide volunteer participants. Participants were screened via the internal Qualtrics support team to meet quotas of 50% of parents who spank and 50% of parents who do not spank. Parents who do not spank were categorized as such based on answers of 0 (never) on the items "spanked with hand" and "spanked with object". Participants who provided nonsense answers for open-ended questions were analyzed with Linguistic Inquiry Word Processing as if they left the questions blank, but their scores were fully analyzed for all survey items. Of the participants that uploaded a legitimate video recording (i.e., followed instruction to provide participant number, recorded for the duration of the study, etc.), 24 participants were eligible for FaceReader analysis.

Materials

Attitudes Toward Spanking My Child (ATS) Scale. This scale was completed to measure the parent's general attitudes toward spanking. The participants rated statements about spanking on a Likert scale (1 strongly agree to 7 strongly disagree).

Parental Responses to Child Misbehavior (PRCM) Questionnaire. Participants rated the frequency with which they used a variety of disciplinary techniques (i.e., negotiated, spanked with hand, withdrew privileges) with their child (0 never to 6 greater than 9 times a week).

Research Articles. Participants were either exposed to an article on cradling bias to serve as a control, or an article on the dangers of spanking as the experimental condition (see Appendix C). The cradling bias article highlights research findings on the left side cradling bias that mothers experience. Research with both humans and other mammals is referenced, and potential explanations for the phenomenon are discussed. The spanking article highlights scientific evidence that spanking is harmful. The author discusses legislation and bans on spanking worldwide, as well as the implications for spanking to be considered a human rights violation.

Demographics. Participants were asked to respond to a variety of demographic questions including age, gender, race, child's age, political orientation, religious affiliation, and education level.

Noldus FaceReader videos. While participants were reading the article and responding to subsequent questions regarding support for spanking, they were asked to videotape their faces and submit the video to a UE Research Dropbox account. This material is required to measure facial expression for detecting emotional micro-expressions using Noldus FaceReader 6.1 technology (Noldus Information Technology, 2016). Noldus technology also provides estimates of heart rate, eye gaze direction, and head orientation (Noldus Information Technology, 2016).

Additional measures. Independently constructed questions were also utilized to assess the frequency with which the participant was spanked as a child (0 never to 6 greater than 9 times a week), their child's behavior generally (1 very misbehaved to 5 very well behaved), and

how they typically discipline (open ended response). Participants were also asked to describe their attitudes toward spanking as a disciplinary technique (open ended response).

Procedures

Participants were first provided an anonymous, informed consent document (Appendix A) detailing the expectations of the study, their participant rights, and the assurance that no information collected could be linked to them specifically. Participants were subsequently asked how many children they had and if they were a U.S. resident to determine eligibility to participate. Eligible participants were directed to detailed instructions on how to record his or herself before beginning the study. Participants were then asked to answer the independently constructed child rearing questions, and questions assessing their spanking history. They completed the Parent Response to Child Misbehavior questionnaire. They were then randomly assigned to either read an adapted scientific article discussing the dangers of spanking or an adapted scientific article on cradling bias. Following the article, participants were asked to rate their attitudes toward spanking by completing the Attitudes Toward Spanking scale, and answering an open-ended question regarding their attitudes on spanking. Participants were also asked to provide demographic information. Once they completed this post-survey, participants were given instructions on uploading their video recording. A password from the video submission completion page was required to continue in the Qualtrics study, as an attempt to ensure video upload. Participants were then debriefed (Appendix D) and provided the researchers' contact information should the participants have questions.

Results

Between subjects analyses of variance (ANOVAs) were conducted to assess the effects of article presentation and parent spanking history on reported support of spanking. There was a

significant interaction between the independent variable of text condition and parent reported spanking on spanking approval (measured by responses to "overall, I believe spanking is a bad disciplinary technique"), $F(1, 167)=6.220$, $p=.014$. Follow up analyses revealed that the manipulation of the independent variable only had a significant effect on those that spanked their children, $F(1, 167)=4.075$, $p=.047$, $\eta^2_p=.047$. Specifically, those that spanked and were exposed to the control text rated spanking more favorably ($M= 4.45$, $SD= 1.94$) than those who were exposed to research on the harms of spanking ($M= 3.59$, $SD= 1.89$). Participants who do not spank were not significantly affected by exposure to either text condition, $F(1, 167)=2.311$, $p=.132$, $\eta^2_p=.027$.

There were no additional significant interactions found with any other items measured by the Attitudes Toward Spanking My Child questionnaire, all Fs$(1, 167) \leq 2.51$, ps $\geq .115$, $\eta^2_p \leq .015$.

LIWC Analysis

For the open ended response regarding participant's attitudes toward spanking, there was a significant interaction between use of spanking and text condition on use of negation words, $F(1, 167)=6.404$, $p=.012$. Follow up analyses indicated that when participants spanked their children, those in the control condition used significantly fewer negations ($M= 2.66$, $SD= 4.70$) than those in the spanking text condition ($M=13.37$, $SD= 26.84$), $F(1, 167)=7.239$, $p=.009$, $\eta^2_p=.081$. For participants who identified as non-spankers, there was no significant difference in use of negations, $F(1, 167)=.645$, $p=.424$, $\eta^2_p=.008$. There was also a significant interaction between text condition and spanking practices on quantifier word use, $F(1, 167)=4.499$, $p=.035$. Participants who were spankers used significantly more quantifier words in the spanking text condition ($M= 10.90$, $SD= 27.44$) than those in the control condition ($M= 2.21$, $SD= 4.11$), $F(1,$

167)= 4.607, p=.035, η^2_p=.053. Among participants who were non-spankers, there was no significant difference between control and spanking text conditions on quantifier word use, F(1, 167)=.303, p=.583, η^2_p=.004. All other LIWC variables of interest were non-significant, all Fs(1, 167) $\leq$ 1.379, ps $\geq$ .242, $\eta^2_p \leq$ .009.

FaceReader Analysis

With 24 usable video recordings submitted by participants, the sample size is not large enough to produce statistical power. However, videos were still analyzed to assess preliminary trends in the data as guidance for future research. These results are pending.

Discussion

While the findings do not support the original hypothesis that participants who spanked and were then exposed to the spanking text condition would "double down" in their support for spanking, the results are much more encouraging. In fact, the exact opposite effect occurred, such that those participants who spanked and then were exposed to information on the dangers of spanking rated spanking as less favorable than those who also spanked but were in the control condition. This suggests that providing scientific evidence was effective in reducing favorability of spanking as a disciplinary technique. These findings are in line with Chavis, Hudnut-Beumler, Webb, Neely, Bickman, Dietrich, & Scholer's (2013) research, which suggests that a brief intervention integrated into a primary care visit has a significant difference on parent responses to the ATS scale compared to parents who did not receive intervention.

The LIWC analyses revealed that more negations were used by those who spanked and were exposed to the spanking text compared to those who spanked but were exposed to the control condition. The category of negations is comprised of 57 words, including no, not, and never (Pennebaker, Boyd, Jordan, & Blackburn, 2015; Tausczik & Pennebaker, 2010). Tausczik

and Pennebaker (2010) report that negations are a psychological correlate of inhibition. One study reported that fewer negations, coupled with more use of exclamation points, was viewed as displaying a positive emotional state (Hancock, Landrigan, & Silver, 2007), suggesting that, conversely, more negations could be associated with a negative emotional state. Another study noted that increased use of negations was linked to defense of a position (Taylor & Thomas, 2008).

Analyses revealed the quantifier use was significantly higher in spankers in the spanking text condition relative to spankers in the control condition, which indicates that spankers exposed to information on the dangers of spanking used more words signaling quantity, such as few, many, and much (Pennebaker et al., 2015). While no psychological correlates have been found for quantifier use (Tausczik & Pennebaker, 2010), in this particular study, more use of these words could suggest that participants are qualifying the amount of spanking that they deem acceptable. This is a particularly interesting explanation given that quantifier use is only significant in those that spank and were then exposed to the dangers of spanking, suggesting that participants felt the need to qualify their answers.

Limitations and Future Directions

Due to the inherent nature of research, this study is limited in its generalizability. The sample collected was comprised only of parents who are signed up for the Qualtrics survey participation service, which means all participants had access to a computer and Internet. While the attitude change found is encouraging, it was tested immediately after intervention, and cannot predict long-term attitude change. Ideally, subsequent studies would measure reported attitudes toward spanking immediately after experimental manipulation, and then subsequently at time 2 to measure the longevity of the attitude change.

Participant responses were also self-reported, which is always susceptible to bias or error in reporting that does not necessarily reflect true attitudes. This limitation was partially mitigated by facial expression analysis, as participants cannot mask their micro expressions, which are therefore indicative of true attitudes and reactions. While the hypotheses were not supported, this study represents only one method of measuring cognitive dissonance, but alternative methods exist. Future research could explore use of other methodological techniques to measure dissonance. Further studies should explore the direction of quantifiers used by those who both spank and are exposed to research on the dangers of spanking. This follow up could clarify if spankers are qualifying their experiences such that a few spanks are acceptable, or such that even a few spanks are maladaptive.

Conclusion

With the prevalence of spanking use as a disciplinary technique still high (Vittrup, Holden, & Buck, 2006; Lansford, Wager, Bates, Pettit, & Dodge, 2012) despite research that reveals myriad consequences of spanking (e.g., Gershoff, 2008), a continued critical examination of effective interventions must occur. Specifically, researchers must work to better understand determinants of spanking generally, and how to subsequently change attitudes effectively. This present research reveals that providing information on the dangers of spanking may indeed be effective at reducing approval of spanking behaviors, at least in the short-term. A complete understanding of the successes and consequences of how information on the dangers of spanking is disseminated is vital to shaping public policy and intervention programs.

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Appendix A

UNIVERSITY OF EVANSVILLE
College of Arts and Sciences
Department of Psychology and Neuroscience
CONSENT TO PARTICIPATE IN A RESEARCH STUDY

We are asking you to participate in a research study. This form is designed to give you information about this study. We will describe this study to you and answer any of your questions.

Project Title: Exploring Attitudes Toward Child Rearing

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Expected duration of participation
We anticipate that the study and your participation will last approximately 20-25 minutes.

What the study is about
This study involves research and the purpose of this research is to assess attitudes toward child rearing.

Number of participants involved in the study
We expect to have up to 200 participants in this national study. All participants must be 18 or older and parents to participate.

What we will ask you to do and procedures to be followed
We will ask you to complete a questionnaire assessing your attitudes toward child rearing, which should take approximately 5 minutes. We will ask you to read a short article. This should take 5 minutes. Then, we will ask that you answer additional questionnaire items. We will also ask you to respond to basic demographic questions. At the beginning of the study, you will be provided instructions for video recording yourself during the remainder of the study. These videos will only be assessable to the researchers and your confidentiality will be maintained.

Taking part is voluntary and you may refuse or discontinue participation at any time

You must be 18 years old or older to participate in this study. Your participation in this study is entirely voluntary. You may refuse to participate at any time, or you may skip any questions that you do not feel comfortable answering with no penalty or effect on compensation.
If you have any questions or concerns regarding your rights as a participant in this study, you may contact the University of Evansville Institutional Review Board (IRB) Chair, Johnna Denning-Smith at 812-488-2551.

Risks or discomforts
Any research study can carry some risks. The types of risk or discomfort in a research study can vary depending on the nature of the study and the level of risk or discomfort can range from little to none, up to a significant amount.

We consider this to be a low-risk study. We do not anticipate any significant risks from participating in this research; however, it is impossible to guarantee that no risks will result from participating in this (or any) study.

Benefits
Knowledge gained from this study may further our understanding of attitudes toward child rearing.

Cost(s) of participating
There are no costs to participants.

Payment for participation
Participants will be compensated $5.00 for participation in this study. Compensation will be awarded through Qualtrics.

Privacy/Confidentiality
Please note that the survey is being administered via Qualtrics, a company not affiliated with the University and with its own privacy and security policies that you can find at its website. We anticipate that your participation in this survey presents no greater risk than everyday use of the Internet.

Data Sharing
De-identified data from this study may be shared with the research community at large to advance science and health. ("De-identification" is the process used to prevent a person's identity from being connected with information. This means that data from the study may be shared in a way that does not identify any individual research participants, for the sake of their privacy.) We will remove or code any personal information that could identify you before files are shared with other researchers to ensure that, by current scientific standards and known methods, no one will be able to identify you from the information we share. Although you will be videotaped, we will not collect identifying information (name, social security number, etc.), and therefore, we will have no way of linking your video to your identity. All data will be kept private and confidential, and accessed only by the researchers.

If you have questions

The main researcher conducting this study is Kristen Fowler, an undergraduate student, at the University of Evansville. If you have questions later, you may contact Kristen Fowler at kf144@evansville.edu. If you have any questions or concerns regarding your rights as a subject in this study, you may contact the University of Evansville Institutional Review Board (IRB) at 812-488-2551, or you may access their website at: https://www.evansville.edu/offices/grants/irb.cfm.

Statement of Consent

Clicking "next" signifies your consent to take part in the study.

Appendix B
Pre Survey

Parental Response to Child Misbehavior Questionnaire (adapted from Holden and Zamarano, 1992, referenced in Vittrup, Holden, and Buck, 2006)

On average, how often did you/do you use the following discipline strategies:

1. Reasoned

0 (never) 1 (<1 time/week) 2 (1-2 times/week) 3 (3-4 times/week) 4 (5-6 times/week) 5 (7-8 times/week) 6 (>9 times/week)

2. Diverted

0 (never) 1 (<1 time/week) 2 (1-2 times/week) 3 (3-4 times/week) 4 (5-6 times/week) 5 (7-8 times/week) 6 (>9 times/week)

3. Negotiated

0 (never) 1 (<1 time/week) 2 (1-2 times/week) 3 (3-4 times/week) 4 (5-6 times/week) 5 (7-8 times/week) 6 (>9 times/week)

4. Threatened

0 (never) 1 (<1 time/week) 2 (1-2 times/week) 3 (3-4 times/week) 4 (5-6 times/week) 5 (7-8 times/week) 6 (>9 times/week)

5. Used time outs

0 (never) 1 (<1 time/week) 2 (1-2 times/week) 3 (3-4 times/week) 4 (5-6 times/week) 5 (7-8 times/week) 6 (>9 times/week)

6. Spanked with hand

0 1 2 3

(never) (<1 time/week) (1-2 times/week) (3-4 times/week)
4 5 6
(5-6 times/week) (7-8 times/week) (>9 times/week)

7. Spanked with object

0 1 2 3
(never) (<1 time/week) (1-2 times/week) (3-4 times/week)
4 5 6
(5-6 times/week) (7-8 times/week) (>9 times/week)

8. Ignored

0 1 2 3
(never) (<1 time/week) (1-2 times/week) (3-4 times/week)
4 5 6
(5-6 times/week) (7-8 times/week) (>9 times/week)

9. Withdrawn privileges

0 1 2 3
(never) (<1 time/week) (1-2 times/week) (3-4 times/week)
4 5 6
(5-6 times/week) (7-8 times/week) (>9 times/week)

10. Yelled in anger

0 1 2 3
(never) (<1 time/week) (1-2 times/week) (3-4 times/week)
4 5 6
(5-6 times/week) (7-8 times/week) (>9 times/week)

11. Slapped hand

0 1 2 3
(never) (<1 time/week) (1-2 times/week) (3-4 times/week)
4 5 6
(5-6 times/week) (7-8 times/week) (>9 times/week)

12. Slapped face

0 1 2 3
(never) (<1 time/week) (1-2 times/week) (3-4 times/week)
4 5 6
(5-6 times/week) (7-8 times/week) (>9 times/week)

1. How would you rate your child's behavior?

1	**2**	**3**	**4**	**5**
(very misbehaved)				(very well behaved)

2. How often were you spanked as a child?

0	**1**	**2**	**3**
(never)	**(<1 time/week)**	**(1-2 times/week)**	**(3-4 times/week)**

4	**5**	**6**
(5-6 times/week)	**(7-8 times/week)**	**(>9 times/week)**

3. How old was your child when you used spanking most often as a disciplinary technique?
(drop down with ages 0-18)

4. Please describe the process of how you typically discipline(d) your child.
(open ended)

Post Survey

Attitudes Towards Spanking My Child Questionnaire (adapted from Holden and Zambarano, 1992)

It is a parent's right to spank.

1	**2**	**3**	**4**	**5**	**6**	**7**
(strongly agree)						(strongly disagree)

Spanking is/was a normal part of my parenting.

1	**2**	**3**	**4**	**5**	**6**	**7**
(strongly agree)						(strongly disagree)

Sometimes the only way to get my child to behave is/was with a spank.

1	**2**	**3**	**4**	**5**	**6**	**7**
(strongly agree)						(strongly disagree)

Sometimes a spank is/was the best way to get my child to listen.

1	**2**	**3**	**4**	**5**	**6**	**7**
(strongly agree)						(strongly disagree)

A spank is/was not an effective method to change my child's behavior long-term.

1	**2**	**3**	**4**	**5**	**6**	**7**
(strongly agree)						(strongly disagree)

When all is said and done, spanking is/was harmful for my child.

1	**2**	**3**	**4**	**5**	**6**	**7**
(strongly agree)						(strongly disagree)

Overall, I believe spanking is a bad disciplinary technique.

1	**2**	**3**	**4**	**5**	**6**	**7**
(strongly agree)						(strongly disagree)

1. Please describe your attitudes toward spanking as a form of disciplining children. (open ended response)

Demographics

Please provide the following information about yourself.

Age:

Gender: Male Female Other

Race: White/Caucasian African American Asian Hispanic Other

Current Age(s) of Child/ren:

When it comes to politics, how liberal or conservative are you? (choose one)
Extremely Liberal Liberal Slightly Liberal Moderate
Slightly Conservative Conservative Extremely Conservative

Which of the following degrees do you have? Choose <u>ALL</u> that apply:
Some High School High School Diploma Some College
Associates Degree Bachelors Masters
J.D. Doctorate Other:_____

When it comes to religion, how religious are you? (choose <u>one</u>)
Extremely Religious Moderately Religious Slightly Religious Not at all Religious

How often do you attend religious services?
Daily Once every week About every other week
About once a month A couple times a year Usually just once a year Never

Appendix C

Experimental condition: Adapted from "Report on Physical Punishment in the United States: What Research Tells Us About Its Effects on Children" by Dr. E. T. Gershoff

Research Highlights

Gershoff's report synthesizes one hundred years of social science research and many hundreds of published, peer-reviewed studies on physical punishment conducted by professionals in the fields of medicine, psychology, education, social work, and sociology, among other fields. The research supports several conclusions:

♦ There is little research evidence that physical punishment (spanking) improves children's behavior in the long term.

♦ There is substantial research evidence that physical punishment makes it **more**, not less, likely that children will be defiant and aggressive in the future.

♦ There is clear research evidence that physical punishment puts children at risk for negative outcomes, including increased mental health problems and increased aggression (Lansford, et al., 2012).

♦ There is consistent evidence that children who are physically punished are at greater risk of serious injury and physical abuse.

♦ Several health and science organizations oppose the use of child physical punishment (spanking), including, for instance: the American Academy of Pediatrics, Division 37 of the American Psychology Association; Child and Family Policy and Practice, and the American Medical Association.

How is physical punishment of children a human rights issue?

Consensus is growing in the international community that physical punishment of children violates international human rights law. Indeed, the following 7 multilateral human rights treaties have argued that physical punishment of children is a violation of human rights law: the United Nations (U.N.) Convention on the Rights of the Child (CRC), the International Covenant on Civil and Political Rights (ICCPR), the International Covenant on Economic, Social and Cultural Rights (ICESCR), the U.N. Convention Against Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (Torture Convention), the American Convention on Human Rights (American Convention), and the two European Social Charters.

The Convention on the Rights of the Child is unique in being the first international treaty to focus solely on the physical, social, cultural, political, and civil rights issues of children. The United States was among the countries that played a key role in the drafting of the Convention over a 10-year period. The Convention on the Rights of the Child has been ratified (or accepted into law) by 192 countries. Only two countries have signed but not ratified the treaty: Somalia and the United States.

Which countries have banned all physical punishment?

More than 100 countries and principalities have banned physical punishment in the schools. Importantly, 24 countries have prohibited physical punishment in all settings, including the home: Sweden (1979), Finland (1983), Norway (1987), Austria (1989), Croatia (1994), Cyprus (1994), Denmark (1997), Latvia (1998), Bulgaria (2000), Germany (2000), Israel (2000), Iceland (2003), Romania (2004), Ukraine (2004), Hungary (2005), Greece (2006), Chile (2007), the Netherlands, (2007), New Zealand (2007), Portugal (2007), Uruguay (2007), Spain (2007), Venezuela (2007), and Costa Rica (2008).

Conclusions

The mounting research evidence that physical punishment of children is an ineffective parenting practice comes at a time of decreasing public support for child physical punishment within the United States and around the world. The majority of American adults are opposed to physical punishment by school personnel. An increasing number of Americans (now 29%) are opposed to physical punishment by parents. At the same time, there is a growing momentum among other countries to enact legal bans on all forms of child physical punishment, bolstered by the fact that the practice has come to be regarded as a violation of international human rights law. There is little research evidence that physical punishment improves children's behavior in the long term. In contrast, there is substantial research evidence that physical punishment puts children at risk for negative outcomes, including increased aggression, antisocial behavior, mental health problems, and physical injury. The clear connections between physical abuse and physical punishment that have been established in empirical research, suggesting that attempts to reduce parents' use of physical punishment should be included as integral parts of state and federal child abuse prevention efforts.

Control condition: Adapted from "Mother-Baby Bonding Insight Revealed" by BBC News and "When left means right: an explanation of the left cradling bias in terms of right

hemisphere specializations" by Drs. V. Bourne and B. Todd

Research Highlights

- Previous research has indicated that 70-85% of women and girls show a bias to hold infants, or dolls, to the left side of their body.
- Large-scale studies, where handedness measures were made by self-report, showed a significant majority of left-handed women also cradled on the left side.

Scientists say they have solved the mystery of why mothers tend to cradle newborn babies on the left.

This position activates the right hemisphere of the brain, which is involved in functions that help in communication and bonding, they say. The "positional bias" is not unique to humans, with their advanced brains, but is also found in animals, according to researchers in Russia. Similar behavior has been seen in baby mammals following their mothers.
They include kangaroos and horses on land and walruses and orcas in the sea.
Dr Yegor Malashichev of Saint Petersburg State University, said the position helped in survival and social bonding. "If there is no eye contact, or it is wrong, there is no activation of the right hemisphere of the infant... the right hemisphere is responsible for social interactions," he told BBC News. "All the [11] species we studied demonstrated the lateral bias. We suggest that this bias is even more widespread and may be a characteristic of all mammals, with few exceptions."

Eye contact

It has long been known that humans and great apes tend to cradle their babies on the left, particularly during the first weeks of an infant's life. Various explanations have been proposed, including physical contact - so an infant can hear their mother's heartbeat - or practical benefits to the mother, who can keep a hand free for other tasks (if right-handed). Alternatively, some have proposed it could be related to eye contact and its effect on the brain. When a mother cradles her baby to the left and face-to-face, the left eyes of the mother and infant are directed towards each other, say the researchers.
Thus, the visual information goes mostly to their right hemisphere of the brain, the side involved in functions such as attention, memory, reasoning, and problem solving (all of which contribute to effective communication).

The researchers looked at humans and 10 wild animals:

- Feral horses
- Walruses
- Reindeer
- Antelope
- Musk ox
- Sheep
- Whales
- Orca

- Kangaroos

The scientists found the young animals kept close to the right side of their mother.
This meant they watched her mainly with their left eye, activating the right hemisphere of the brain. While doing this, they were less likely to get separated from their mother and more likely to be able to find her again if they got lost. Animal mothers tended to move to monitor their young with their left eye at times of stress. For example, the researchers found that orca mothers swam to the right of their infants when the researchers approached them in a boat. This happened regardless of the side from which the boat was approaching. This runs contrary to the expectation that the mother would "defend" the infant by placing her body in between the calf and the boat, they say. Dr Malashichev said the "cradling or positional bias" was not unique to humans or species with advanced brains such as whales but was "really widespread;" so the mechanism was likely to be "ancient and really basic." The research could also have implications in studying development disorders associated with reduced eye contact between mother and infant, such as autism spectrum disorder, he added. The study, by teams based in Russia, the US and Australia, is published in Nature Ecology & Evolution.

Appendix D
Debriefing Statement

The purpose of this study was to explore predictors of attitudes toward child disciplinary techniques.

A parent's decisions regarding child disciplinary techniques, and more broadly child rearing, can be based on a myriad of factors, such as societal or cultural norms (e.g. Fontes, 2005). Some of the most frequently used disciplinary tactics are diversion, reasoning, negotiation, and spanking (Vittrup, Holden, & Buck, 2006). In our study, we were interested in exploring ways that scientific information regarding child disciplinary techniques could best be disseminated to effectively shape parental disciplinary intentions. If you are interested in reading a review of empirical research regarding child physical punishment, see Gershoff, 2008.

Thank you for you participation in our study. If you have any questions, please feel free to contact the researcher, Kristen Fowler, by emailing kf144@evansville.edu.