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**Physical Punishment across Generations: Factors Associated
with Continuity and Change in Subsequent Generations**

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**Physical Punishment across Generations: Factors Associated
with Continuity and Change in Subsequent Generations**

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Dedication

This dissertation is dedicated to my family who always provided words and acts of encouragement and knew I could do this. They helped make me who I am today, thus I am grateful.

This dissertation is also dedicated to Sean Mintz, who always took the time to read whatever I presented to him. His support, time, and love were cherished in more ways than he can ever know.

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**Physical Punishment across Generations: Factors Associated
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This study examined as risk and protective factors which may promote or deter physical punishment use across generations. This study used self-report information from parents (N = 211) who had a child between the ages of 2-6. Additionally, the participating parents were also asked if they would like to invite one of their parents (e.g., the grandparent) to participate. Grandparents (N = 65) completed the same questionnaires as their adult child, though grandparents were asked to reflect upon when they were parenting the adult child.

Four risk factors promoting physical punishment were examined: childhood histories of physical punishment, favorable attitudes towards physical punishment, feeling of anger and stress. As expected, parents' childhood physical punishment, high feeling of anger and stress were associated with parents using physical punishment techniques with their own children. This study also investigated the salience of such risk

factors in promoting physical punishment to continue, above the influence of receiving physical punishment as a child. Parents' current favorable attitudes towards physical punishment predicted their use of physical discipline with their children, even after controlling for childhood histories of being physically punished. When parents' childhood experiences of physical punishment and feelings of anger were considered together, parents' childhood experiences significantly predicted using physical punishment; feelings of anger were marginally related to physical punishment practices. Similar results were found when parents' childhood experiences and feelings of stress were considered together.

Additionally, four risk factors deterring physical punishment were examined: feelings of resentment about childhood experiences of physical punishment, effective anger regulation and stress coping techniques. Parents who were spanked frequently as a child, but had low feelings of resentment about being spanked were at greater risk of using physical punishment on their child, compared to parents who were spanked frequently, but had higher feelings of resentment. Parents' abilities to regulate their feeling of anger and cope with stress were not associated with parents less use of physical punishment.

Finally, grandparents' and parents' reports of physical punishment use were different, with parents using less physical punishment on their child than what they experienced as a child.

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CHAPTER ONE

Overview

Understanding why parents use physical punishment with their children has become a topic of popular interest, especially given the outcomes associated with physical punishment use. There is some research among European and African Americans with various socioeconomic levels highlighting that moderate spanking has benign or beneficial outcomes for certain children (Deater-Deckard & Dodge, 1997; Gunnoe & Mariner, 1997; Whaley, 2000). Yet, the vast majority of studies document ways that physical punishment contributes to childhood aggression (Deater-Deckard, Dodge, Bates, & Pettit, 1996; Ulman & Straus, 2003); impaired parent-child relationships (Crockenberg, 1987; Gershoff, 2002); delinquent, criminal and antisocial behavior (McCord, 1979; Straus & Mouradian, 1998); and depression during adolescence and adulthood (Bender et al., 2007; Holmes, & Robins, 1987, Straus, 1994, Straus, Sugerma, & Giles-Sims, 1997). Additionally, the use of harsh punitive punishment has been associated with child abuse (Bower-Russa, Knutson, & Winebarger, 2001; Dixon, Browne & Hamilton-Giachritsis, 2005). Given the negative outcomes associated with physical punishment as well as the possible link to child abuse, it is important to understand why some parents employ such discipline practices with their own children whereas others do not.

Intergenerational researchers focus on how individuals' experiences within their family of origin influence children's development over time. These experiences contribute to the childrearing practices and quality of care they provide their own

children when they become parents (Anderson & Sabatelli, 2003). Research on parents' use of physical punishment lends support to this intergenerational cycle (Deater-Deckard, Lansford, Dodge, Pettit, & Bates, 2003; Holden & Zambarano, 1992; Rodriguez & Sutherland, 1999). However, the decline in use of physical punishment (Straus & Mathur, 1996; Straus, 2001b) suggests that not all parents repeat the physical punishment practices with their own child that they experienced during childhood.

The goal of this study is to identify antecedents and processes underlying continuity in physical punishment practices from one generation to the next. Thus, the proposed study will examine parents' physical punishment experiences as a child as predictors of their current use of physical punishment practices on their own children. After defining physical punishment, the extent to which it is transmitted across generations will be discussed. Next, two theoretical approaches to understanding the intergenerational transmission of physical punishment, social learning theory and social psychology, will be elaborated.

In addition to examining continuity, the proposed study will examine factors that might account for intergenerational discontinuity of punishment practices. While examining factors related to physical punishment use, researchers have identified that parental attitudes and beliefs about physical punishment (Ateah & Durrant, 2005; Durrant, Rose-Krasnor, & Broberg, 2003; Holden et al., 1992), levels of stress (Garvey, Gross, Delaney, Fogg, 2000; Pinderhughes, Dodge, Bates, Pettit, & Zeli, 2000; Rodriguez & Green, 1997) and levels of emotions, such as anger (Jackson, Thompson, Christiansen, Colman, Wyatt, & Buckendahl, 1999; Peterson, Ewigman, & Vandiver,

1994), are all important to consider. Thus, the proposed study will examine similarities and differences between parents and their parents (the grandparent) attitudes about physical punishment, their abilities to cope with stress, and regulate negative emotions, such as anger.

CHAPTER TWO

Review of the Literature, Principle Questions, and Hypotheses

Definitions Associated with Physical Punishment

Questions surrounding appropriate ways to effectively discipline children have led to heated debates and confusion. In order to examine parental punishment practices further, it is important to clarify what is meant by “physical punishment.” Clinicians and researchers view the terms “discipline,” “punishment,” and “guidance” differently. Holden (2002) contends that discipline usually involves instruction and guidance, while punishment is intended to suppress child responses that are viewed unfavorably by the parent or adult. Whereas Holden asserts that discipline involves guidance, Gartrell (2000) differentiates discipline and guidance. Gartrell (1997) states that the problem with parents using discipline is that discipline involves punishing children for making mistakes or having problems they cannot solve. “Guidance,” on the other hand, teaches children how to solve their problems or learn positive alternatives to their mistakes. Put another way, discipline is viewed as a way to keep children in line, whereas guidance is a method to teach them “tools for life.”

In addition to distinctions among punishment, discipline, and guidance, one needs to consider how parents physically respond to their child’s misbehavior. Physical punishment is often defined as the use of physical force with the intention of causing physical pain, but not injury, for purposes of correction and control (Straus, 2001a).

Forms of physical punishment can vary, such as slapping, spanking, pinching, or flicking. Disciplinary spanking is thought of differently by some, though the behaviors mirror what other reports define as physical punishment. Disciplinary spanking is defined as being physically non-injurious and administered with an open hand to the extremities or buttocks, with the intention of modifying behavior (Friedman & Schonberg, 1996; Straus, Sugerma, Giles-Sims, 1997). While researchers often distinguish among terms associated with physical punishment, in this paper, I will use a similar definition for physical punishment as that of Strauss, being defined as open-handed spanking (confined to the buttocks) or physical contact (i.e., hitting, slapping, pinching) resulting in no injuries or lasting marks (Strauss, 2001).

An Intergeneration Transmission of Physical Punishment

Despite the plethora of research documenting the negative effects of discipline on children, 94 % of American parents admit to having used physical punishment on their children at least once by the time their children were three or four years of age (Straus & Stewart, 1999). Support for physical punishment lies within the medical community as well with some pediatricians maintaining that physical punishment is appropriate if done by loving adults in a non-harmful way (Baumrind, 1996; Evans & Fargason, 1998). Given the widespread acceptance of and even advocacy for physical punishment, despite the negative outcomes associated with its use, it is important to determine why physical punishment continues to be a common disciplinary technique among parents.

Many developmental scientists and clinicians agree that patterns of childrearing are transmitted across generations (Serbin & Karp, 2003; Stattin, Janson, Klackenberg-Larsson, & Magnusson, 1995). Van Ijzendoorn (1992) defines intergenerational transmission as the “process through which purposively or unintendedly an early generation psychologically influences parenting attitudes and behavior of the next generation” (pg. 76-77). This definition excludes continuity due to contextual influences (e.g., physical and social circumstances) and genetics. While genetic and contextual continuity have been well documented (Caspi, Ben & Elder, 1989; Quinton & Rutter, 1984), they are outside of the scope of this paper.

Across numerous studies, parents’ discipline practices are shown to be similar to those they received as a child, supporting the notion of intergenerational transmission of physical punishment practices (Deater-Deckard, et al., 2003; Holden et al., 1992; Rodriguez et al., 1999). Straus (1991) illustrates intergenerational continuity through a feedback loop which details the causes of physical punishment and the conditions under which physical punishment is administered, and finally, the effects of physical punishment on children. He suggests that physical punishment affects the characteristics of individuals as well as society, which, in turn, influences the probability of using physical punishment on subsequent generations. Following this line of research, other studies provide evidence for an intergenerational transmission of punishment practices both in the U.S. (Deater-Deckard, Pettit, Lansford, Dodge, & Bates, 2003; Holden & Zambarano, 1992; Rodriguez & Sutherland, 1999; Straus, 1983) as well as cross-culturally (Fry, 1992; Stattin, Janson, Klackenberg-Larsson, & Magnusson, 1995).

Numerous researchers have investigated what exactly is being carried forward when physical punishment practices continue and have found different patterns associated with continuity. The frequency of physical punishment received by parents during their own childhood has been linked to their approval of using such practices (Buntain-Ricklefs, Kemper, Fell, & Babonis, 1994; Durrant, 1994). Approval of physical punishment as a result of past experiences even exists in individuals who do not yet have children. For instance, Holden and Zambarano (1992) examined children who had received high amounts of what they termed ‘corporal punishment’ in childhood. These children were more likely to report that they would use corporal punishment as parents when presented with hypothetical vignettes of children’s behavior.

In addition to frequency, the specific types of discipline experienced in childhood can influence parents’ approval of those disciplinary actions. Adults who experienced spanking in childhood are more accepting of the use of a similar form of punishment (Bower-Russa, Knutson & Winebarger, 2001; Graziano & Namaste, 1990). Similar trends have been found for parents and grandmothers use of “smacking” across generations (Murphy-Cowan & Stringer, 1999). In order to determine exactly what is carried forward to future generations, Rodriguez and Sutherland (1999) characterized punishment by frequency, type, severity, as well as how typical parents believe the punishment to be used and entered each as independent variables to predict parent’s discipline practices. Results confirmed that a history of experiencing specific punishment practices as well as parents’ perceptions of severity were both significant predictors of actual punishment practice. In other words, having experienced a particular form of

punishment, such as spanking for example, predicted its use versus other forms of physical punishment, such as pinching for example. Additionally, if parents did not perceive a particular form of punishment to be overly severe, then that too predicted its use.

Similar intergenerational patterns have been found in abusive practices as well. Several studies have shown that the majority of abusing parents were also abused when young (Egeland, Jacobvitz, & Papatola, 1987; Milner & Chilamkurti, 1991; Pears & Capaldi, 2001). Altemeier and colleagues (Altemeier, O'Connor, Sherrod, Tucker, & Vietze, 1986) found that mothers, who reported that they were severely hit or beaten as children, were more likely to recommend "abusive discipline" (i.e., hitting their children in places other than their hands, legs, or buttocks), compared to their counterparts who did not report abuse. Physically abusive parents are also more likely to endorse the use of harsh spanking and other forms of punitive, physical punishment practices (Crouch & Behl, 2001; Straus, 2000). In sum, past research efforts have successfully highlighted different patterns of continuity in physical punishment practices across generations. Studies documenting how punishment is carried forward intergenerationally (e.g., type, frequency and severity) have proliferated (Bower-Russa, et al., 2001; Deater-Deckard, et al., 2003; Graziano et al., 1990; Rodriguez et al., 1999). Less is known about the processes or mechanisms underlying the continuity of physical punishment. This is important for those who work with families on extinguishing undesirable behaviors. Understanding the mechanisms of continuity will help clarify exactly what is carried forward, and under what circumstances transmission occurs. Understanding why something is carried forward is important before it can be stopped.

Mechanisms of Intergenerational Transmission: Two Theories

Intergenerational models are concerned with how patterns and dynamics of family interaction provide a context for an individual's development and future behaviors.

According to social learning theory, there are two proposed methods of transmission to subsequent generations, direct and mediated pathways (Capaldi, Pears, Patterson, & Owen, 2003). The direct path is hypothesized to be due to the child learning the parenting behaviors exhibited to them, and then engaging in similar parenting behaviors as an adult. Social learning theorists claim that physical punishment practices are learned in childhood and merely mimicked in adulthood when children become parents (Gelles & Straus, 1983). Children learn to use and value violence (in this case physical punishment) by observing and modeling their parents' behavior (Bandura, 1973, 1977). Since those who use physical force are not punished but rewarded for their actions (i.e., gain control of the behaviors of others), then observers will be more likely to employ such tactics in interaction with others (Bandura, 1977). This is especially likely given that certain forms of physical force, such as physical punishment is legal and a frequent choice of discipline among parents.

The alternative model explaining the transfer of parenting practices to subsequent generations is through mediated pathways. The mediated pathway involves two steps, however, and may be conceptualized through levels of aggressive behavior. The first step involves the development of antisocial behavior in the child as a result of poor parenting. Children's learned antisocial behavior is associated with the use of unskilled,

aggressive, and coercive behaviors with peers (McCord, 1988; Patterson & Capaldi, 1991). In other words, children learn antisocial behavior through their family of origin, such as the use of physical force as a means of gaining control of the person and/or their behaviors, and then use such techniques with peers. The second step in the hypothesized mediational pathway of parenting across generations is the association between the development of antisocial behavior in children, and antisocial behavior in parents (Patterson et al., 1991). For instance, physical punishment during childhood may simply result in teaching and promoting a set of antisocial behaviors or a coercive interpersonal style that then affects future behaviors with their own children. Thus, children's aggressive behaviors are carried forward into adulthood and when they become parents, they use physical punishment on their children.

An additional pathway involves transmitting the experiences during childhood into adulthood via an ideology about parenting that places a high value on using physical discipline. In doing so, children who later become parents would believe such parenting practices are a "normal" part of parenting since that is what they themselves experienced. Thus another tenet of social learning theory is the idea that a person may develop a set of rules or norms concerning the desirability of physical punishment as a result of a childhood history of such practices. This form of thinking pertains to attitudes and beliefs about physical punishment which may be carried forward. As a result, when parents use physical punishment, it is accompanied by a hidden curriculum that "violence should be used to secure good ends" as well as the "idea of violence is permissible when other things don't work" (Straus, Gelles, & Steinmetz, 1980, pp. 103-104). In other

words, social learning theorists would argue that physical punishment teaches children that when someone is not compliant, it is permissible to hit them. In a similar line of thinking, Simons and colleagues (1991) found that a belief in the legitimacy of strict, physical discipline mediated (in part) the linkage between the experience of harsh discipline in childhood and its commitment when an adult (Simons, Whitbeck, Conger & Chyi-in, 1991). Therefore, based on the punishment practices experienced during childhood, the punishment practices an adult uses with their own children may be seen either as reflexive or as a parenting philosophy/attitude that justifies the use of physical punishment. With either form of social learning, the behavior is carried forward and continuity exists across generations.

Whereas social learning approach is one theoretical approach that attempts to explain the intergenerational transmission of physical punishment, an alternative explanation draws on ideas from social psychology. Given the intergenerational transmission of physical punishment, researchers from a social psychological perspective attempt to understanding what predicts behavior by studying the interrelatedness among attitude, affect, and behavior.

Attitudes towards physical punishment are formed very early in life. Research shows that children and young adolescents often have more favorable attitudes towards physical punishment use compared to non-physical discipline techniques, such as love withdraw or permissiveness (Dadds, Adlington, & Christensen, 1987). Similarly, others report that adolescents are more likely to use physical punishment when they become parents if they themselves received it as a child (Holden & Zambarano, 1992). Thus,

from a young age, most children view physical punishment as an appropriate and normative parenting practice. Since attitudes often predict behavior, and behavior is transmitted across generations, the question then becomes, what are the developmental origins of attitudes?

An attitude, defined as “a psychological tendency expressed by evaluating a particular entity with some degree of favor or disfavor” (Eagly & Chaiken, 1993, pp. 1), is often thought to be stable across time and context. However, others would argue that attitudes are constructed in the moment (Schwarz & Bohner, 2001). According to Schimmack and Crites (2005), when an individual is initially confronted with an attitude-object (term used to refer to the subject or object to which the person has formed attitudes about, e.g., physical punishment), they will most likely view it as either of value, effective, and important or not. The experience of such feelings in turn, conveys information that something is good or bad and important or trivial and thus influences attitudes. How a person comes to view something as valuable, important, effective is important to consider since it is strongly linked to attitude formation.

Social psychologists believe that a particular attitude may arise in response to certain motivational pressures, affect and cognition (Zajonc & Markus, 1982). Traditionally, the affective component of attitude formation includes emotions, drives, or feelings associated with an attitude-object, whereas the cognitive component includes beliefs, judgments, or thoughts associated with an attitude-object (McGuire, 1969). For instance, forming a negative attitude towards physical punishment use may stem from memories of having felt humiliated when receiving physical punishment as a child. For

affective-based attitudes, emotional reactions are considered more powerful than cognitive appraisals in affecting a person's behavior. This idea is supported in Meshkin's report (1987) of parents who had negative attitudes about physical punishment use because of negative childhood memories when it was used. Alternatively, the individual may acquire relevant information subsequent to the affective appraisals, and such information may either confirm (e.g., physical punishment impairs the parent-child relationship) or bolster the initial attitude (e.g., physical punishment does gain immediate child compliance).

On the other hand, a person may have developed certain attitudes about an attitude-object as a result of direct experience, called descriptive beliefs (Fishbein & Ajzen, 1975). For instance, a parent may adopt a favorable attitude towards physical punishment, only after having been exposed to such parenting practices while growing up. A parent may then have formed a favorable attitude towards physical punishment use because they believe that physical punishment is normative and effective in changing children's behavior. This idea shares some of the same tenets as social learning explanations of the transmission of parenting practices across generations. From a social psychological framework, however, beliefs are the foundations of cognitive-based attitudes, with a person's attitude toward an object primarily a function of his/her salient beliefs at a given point in time (Fishbein & Ajzen, 1975).

Whereas some attitudes arise from emotional experiences, others are based on learning (e.g., cognitive-based attitudes). With respect to physical punishment, the information may be provided to them from an outside source, such as another parent,

relative, or family researcher. Such information leads to the formation of an informational belief and could be about the effectiveness of physical punishment, or the negative outcomes correlated with its use, which in turn results in a corresponding attitude. For instance, a parent may adopt an unfavorable attitude towards physical punishment after learning about child negativities correlated with receiving physical punishment (Crockenberg, 1987; Deater-Deckard, et al., 1996; Gershoff, 2002; McCord, 1979; Straus & Mouradian, 1998; Ulman & Straus, 2003).

Although direct observations or experiences of an attitude-object will usually lead to the formation of a descriptive belief, simply acquiring additional outside information may not always lead to the formation of an informational belief. Factors such as being high in general persuasibility, receiving the information from a highly credible source or communicator, and having the receiver uncertain of his/her initial belief all contribute to whether the new information is accepted by the person (Fishbein & Ajzen, 1975).

Affective factors may be important only after, and as a result of, cognitive appraisals triggering the affective response. In such case, the affect may modify or support the initial cognitive appraisal. Thus with both types of attitudes, affective- or cognitive-based attitudes, change is possible via a feedback loop whereby cognition (e.g., societal factors, information) influences affect and visa versa. However, attitude will be expressed with greater confidence when affect is primary or dominant in its acquisition (Edwards, 1990).

Thus attitudes and affect are often intertwined and can similarly lead to attitude change. Similar to notion of attitude change is the idea that an individual may have two different attitudes about the same attitude object. One manifestation of this idea is

attitudinal ambivalence, whereby an individual may hold two attitudes, one positive and one negative, in relation to the same attitude object (Eagly & Chaiken, 1998).

Ambivalence can arise from a multitude of sources, differences in cultural acceptance of a practice, or differences in familial acceptance of a practice. One can activate both a positive and negative evaluation of an attitude object, thus creating ambivalence and producing a subjective state of conflict. During such states of conflict, affective responses may become important when predicting behavior. Interestingly, research highlighting the gains from separating positive and negative attitudes suggests that people's negative attitudes often exert stronger effects on behavior than positive attitudes (Cacioppo, Gardner, & Berntson, 1997).

Another manifestation of the dual attitude idea is the notion that people have both an implicit and an explicit attitude towards the same attitude object (Wilson, Lindsey, & Schooler, 2000). Implicit attitudes are those that are automatically activated and rarely consciously examined. For example, a person who is childless may hold a positive attitude about physical punishment because they were spanked during childhood (e.g., Holden & Zambarano, 1992). Explicit attitudes are those that people actively retrieve from memory and require a more conscious effort from the individual. For example, a new parent may have an explicit attitude about physical punishment only after consciously examining such practice from their childhood and their impact. Wilson and colleagues (2000) assume that generally only one of the dual attitudes is active at any time, thus different than the dual attitudes created from ambivalence.

Changes in Physical Punishment Practices

Despite the high incidence rates of physical punishment in some reports (Straus & Stewart, 1999), the public's attitudes about physical punishment, however, suggest a growing ambivalence. Data from a nationally representative sample of 1,250 adults collected from 1987 to 1992 highlight that the majority of the public view physical punishment and repeated yelling and swearing at children as harmful (Daro & Gelles, 1992). In a more recent survey, 61% of parents of young children and 62% of the adult population viewed physical punishment as an acceptable form of regular discipline (Yankelovich, 2000). Daro and Gelles (1992) highlighted that slightly more than half (53%) of the parents reported spanking or hitting their children during the data collection time period; this is different from the 95% of parents who reported similar behaviors in a separate nationally representative sample in a 1983 report (Straus, 1983). Other reports have documented similar trends, with support for physical punishment declining since the late 1960s (from 94% to 68%), especially among women, the highly educated and those who reside in areas outside the South in the United States (Straus & Mathur, 1996). Straus (2001b) contends that this decrease is continuing. With respect to child abuse, studies concerning the prevalence of abusive parenting indicate that the intergenerational transmission of child abuse is certainly not inevitable; most adults who experienced an abusive childhood do not abuse their own children (Kaufman & Zigler, 1993).

As noted, while some reports offer high percentages of parents who have used physical punishment at least once (Straus & Stewart, 1999), other reports contend that attitudes and use of physical punishment are not as high those reported and are actually changing. One factor which may be related to the mixed reports on physical punishment

use is the way in which the data were obtained. For instance, asking parents if they have ever used physical punishment is different than asking parents if physical punishment is a regular form of discipline. Additionally, asking parents about their attitudes about physical punishment and how often they use physical punishment are two separate components. It must be noted that a major dilemma in research concerning parenting is that, while attitudes and behaviors may be related, they are not always the same. Thus, there seems to be no clear consensus on the actual prevalence of physical punishment since parents may hold negative attitudes about physical punishment, but do not accurately report their discipline behaviors. Therefore, though intergenerational transmission of physical punishment occurs and some parents do not repeat practices from childhood with their own child, the strength of this change may vary depending on the report.

Studies examining the intergenerational transmission of physical punishment in cultures outside the U.S. have found similar evidence of change (Murphy-Cowan & Stringer, 1999). Among Irish parents, when social class was included in the analysis, middle class mothers, who reported the highest levels of physical punishment, such as smacking during their own childhood, reported using less physical punishment with their own children. Thus, while reports with U.S. citizens indicate that highly-educated individuals are more likely to change (Straus & Mather, 1996), this may not be the case in other countries. Though variations may exist between different cultures, there is reason to believe that punishment beliefs or practices can change from generation to generation among many cultural groups.

Breaking the Intergenerational Transmission of Physical Punishment: Factors related to change

It is possible that parents do not repeat the punishment practices they were exposed to as a child. While non-physical discipline techniques have always existed, today parents are becoming more educated about alternative discipline techniques. In turn, non-physical disciplinary techniques are becoming slightly more common among parents (Sears & Sears, 1995). Though the extent to which parents actually employ alternatives to physical punishment is unclear, parental punishment practices are in fact changing. Given these changes in behavior, more investigations should include understanding how or why parents choose non-physical techniques over physical punishment practices. Investigations of such sort are needed to examine the incidence as well as reasons for expecting discontinuity in parental punishment strategies from generation to generation. In other words, why and how do individuals move away from the way they were raised?

In an attempt to address this issue, researchers and practitioners have become interested in teaching parents to be more positive and less harsh in their discipline practices than previously. Many interventions and parent training programs teach parents to use positive guidance strategies, effective parenting skills, better strategies for coping with stress, and new techniques for strengthening children's social skills (Christophersen and Mortweet, 2003; Webster-Stratton, Reid, & Hammond 2001). Existing research points to many valuable outcomes of parenting programs including improved maternal psychosocial health (Barlow and Coren, 2000), improved relationships (Grimshaw and

McGuire, 1998; Smith, 1997) and reduced child behavior problems (Barlow, 1999; Patterson et al., 1993; 2002b). Findings from one qualitative report (Mockford & Barlow, 2004) of parents who attended a parenting program indicates that in addition to many positive consequences, there were a number of unintended consequences when trying to implement the techniques they had learned. One such problem included changing the parents' established habits and those of their partners. These parent training efforts and books share the common premise that parents will adopt these favored alternative strategies over their current practices. However, while some intervention efforts do produce positive changes in parents, some do not always adopt these new discipline strategies and many parents drop out of the intervention and training programs (Danoff, Kemper, & Sherry, 1994). Previous research has also documented that parents may still use physical punishment despite knowledge of alternatives (Wilson, 1996). Therefore, simply providing parents with alternative strategies may not be sufficient to reduce intensity, duration or frequency of physical punishment use. Because most parents still use physical punishment and the shift towards promoting non-physical punishment is recent, very little research has focused on understanding why parents choose not to use physical punishment, despite a childhood history of such practices. Understanding why parents engage in physical punishment will help us to understand the conditions under which parents can change their discipline practices. Likely factors contributing to physical punishment practices include a parent's attitudes about physical punishment, capacity to regulate their emotion, and perceptions of their own level of stress. Investigating the contributing factors of these variables is critical for understand

continuity and change across generations. Further insight into this area will have implications for developing successful interventions that prevent parents from carrying forward physical discipline practices to their own children.

The role of attitudes. One reason it might be difficult for some parents to change their discipline strategies, even after attending parenting courses, is that they have well-established preconceived notions about discipline. Social psychologists have often been intrigued by the attitude-behavior relationship. Holland and colleagues (Holland, Verplanken, & van Knippenberg, 2002) have demonstrated that strong attitudes towards a particular phenomenon, attitudes which are persistent over time and resistant to change, actually guide behavior. Attitudes towards physical punishment use formed very early in life, even before having children, may be less resistant to change and predict parents' behavior when disciplining.

In fact, reports show that attitudes and beliefs are important in influencing its use. Holden and Zambarano (1992) found strong intercorrelations between attitudes, intentions, and practices of physical punishment. Likewise, other researchers have found positive attitudes towards physical punishment significantly predicted its use (Jackson, Thompson, Christiansen, Colman, Wyatt, Buckendahl, Wilcox, & Peterson, 1999; Holden, Coleman, & Schmidt, 1995). On the other side, Jackson and colleagues (1999) found parents who do not endorse physical discipline are less likely to use it. Considering attitudes influences current physical punishment practices, changes in parents' attitudes and beliefs about physical punishment may disrupt the physical punishment cycle across generations.

Some reports have included past childhood punishment experiences to understand current attitudes of physical punishment (Ateah & Parkin, 2002; Buntain-Ricklefs, Kemper, Bell, & Babonis, 1994). For example, in the aforementioned studies, respondents who reported being spanked were more likely to report a positive attitude towards physical punishment. Other reports have documented similar trends, supporting the notion that positive attitudes about physical punishment actually mediate its use (Ateah & Durrant, 2005; Durrant, et al., 2003).

While current attitudes about physical punishment seem related to experiences during childhood, some reports find different patterns. Ringwalt, Browne, Rosenbloom, Evans and Kotch (1989) explored the relationship between adult approval of physical punishment and having experienced physical punishment during childhood. After controlling for income and race in a sample limited to only mothers, no relationship was found between participants' childhood experiences and approval of physical punishment. Thus, given the mixed reports, simply examining childhood punishment history is not always the best indicator when predicting physical punishment use with one's own children.

Additionally, individuals who reported having experienced more harsh punishments or forms of physical punishments other than spanking (i.e., slapping, shaking, whipping, etc) were less likely to report a positive attitude toward physical punishment (Ateah et al., 2002). It is possible that experiences of harsh physical punishment play a role in effecting negative attitudes towards and decisions not to use physical punishment on their own children.

As noted, simply having a history of physical punishment doesn't automatically mean that one will develop a positive attitude toward physical punishment. Future research should investigate more specifically where attitudes about physical punishment stem from. Despite the limitations of past reports, changes in attitudes towards physical punishment may be one important variable when examining discontinuity across generations. To date, there are only a hand-full of studies in which researchers have attempted to change the attitudes of persons who support using physical punishment (Griffin, Robinson, & Carpenter, 2000; Robinson, Funk, Beth, & Bush, 2005). In the aforementioned reports, student participants who became more informed, through empirical research, about the negative effects of and ineffectiveness of physical punishment decreased their favorable attitudes about physical punishment use.

Despite the small numbers of parents not using physical punishment, two unpublished dissertations have documented that some parents who were recipients of physical punishment during childhood did not use physical punishment with their children, and changes were attributed to changes in parents' attitudes about physical punishment (Mishkin, 1987; Sherman, 1997). The Sherman (1997) study found that of the 72 participants who were hit as a child, 53% moved away from using physical punishment. Among the many factors associated with change were the negative effects of being hit as a child. This can lead to changes in these parents' attitudes about physical punishment. Though informative, a limitation of this report is that it relied on participants who attended one of several workshops on discipline offered at a private elementary school, and thus is not a representative sample. While this report provides

evidence that parental training efforts are effective in behavioral modifications (Webster-Stratton, Reid, & Hammond, 2001), not all parents have time, money, or the willingness to attend such workshops. It is unknown if similar results will generalize to parents who have children attending public schools, which are more diverse in socio-economic backgrounds, as well as among parents who do not attend training workshops intended to improve parental behaviors.

Meshkin's (1987) report explored variables that might be influential in affecting a change in one's discipline techniques from that which they were exposed to as a child. This report was obtained from a slightly more representative sample. Subjects consisted of 124 parents of school-aged children who voluntarily agreed to complete a questionnaire developed by the author and who were not recruited from a parental training workshop, but rather their child's school PTA meeting. In addition to a variety of demographic variables associated with the individuals who do not use physical punishment (e.g., race, education, and income), the only non-demographic variable that was significant in influencing the parent's decision to not use physical punishment was observing the effects of others being hit. These respondents remembered feeling embarrassed and degraded when hit as a child. As a result of this negative memory, respondents developed negative attitudes about using physical punishment with their own children. Similarly, Holden and colleagues (Holden, Thompson, Zambarano, & Marshal, 1997), reported on mothers who started using physical punishment with their children, but changed their opinions of its use once they saw their children's negative reactions to being spanked. The child's negative reaction to being spanked resulted in an attitudinal

change in mother's perceptions about physical punishment use. These results support the notion that attitudes, beliefs, and behavior may be influential in breaking the intergenerational cycle of physical punishment as a discipline technique.

Considering that not all parents participate in parental training efforts, Davis (1999) examined incidences of physical punishment cessation among samples of parents, some of who had attended some form of workshop on the topic of spanking and others who had no such training. Davis (1999) interviewed parents who started out spanking their children, and then made a concerted effort to stop. Cessation of physical punishment from parents was associated with changes in their attitudes about physical punishment. Changes in attitudes occurred with respect to five contexts: experiential (child's reaction made them feel guilty, concerned, or hypocritical), ideological (changes in thoughts about who children were as individuals and how children should be treated), regulatory (faced with real or perceived official sanctions, regulatory control, or administrative disapproval), relational (pressure and expectations of friends, relatives, or intimates), and biographical (thoughts and feelings about own childhood became influential when spanking began to look like it wasn't working). While parents' reasons for quitting vary, cessation was generally associated with parents attributing new meanings to practices. In other words, parents viewed changing to non-physical techniques as progress and had new evaluations on their past behavior and why it should now stop. Davis contended that cultural inducements and social support might be as important as learning alternative disciplinary techniques in explaining parents' cessation efforts. Future investigations should heed this advice and include parents' social support

as well as stress, which may likely be lowered by increases in social support, when examining physical punishment practices across generations.

The Davis (1999) report clarifies the limited literature on parents who do not spank. Although the history of physical punishment was assessed (e.g., Were you spanked as a child?), a limitation of this report is that no detail was provided on variables associated with their history of physical punishment (e.g., frequency, intensity, normative, or duration). Additionally, participants in this investigation were once proponents of physical punishment. It could be likely that parents who choose from the beginning to never use physical punishment may be conceptually different from parents who started using physical punishment but stopped, as in Davis's (1999) report.

Given the scarcity and limitations of investigations that emphasize the role attitudes may play in the intergenerational patterns of physical punishment, further investigation is needed. It is important to understand what might deter or prevent this transmission from occurring. It is likely that individuals who experience changes in attitudes or beliefs about the effectiveness or importance of physical punishment are less likely to employ such methods when making discipline decisions with their own children. Intervention efforts and workshops for parents that discuss the topic of physical punishment need to focus on promoting changes in attitudes. Changes in attitudes about physical punishment are, in turn, likely to influence punishment practices. In other words, parent training efforts that only teach alternatives to physical punishment without also changing parental attitudes concerning the desirability or positives associated with

physical punishment use are less likely to be effective in producing positive changes in discipline practices.

However, as noted earlier, not all parents attend such workshops, but nonetheless still have the ability to change their positive attitudes about physical punishment, despite having a childhood history of such practices (Davis, 1999; Meshkin, 1987). Changes in attitudes may arise from within the individual as opposed to an external source, such as parent training efforts. For example, parents' values and the importance they place on parenting may have an effect on their behaviors and beliefs about physical punishment. Luster and Kain (1987) found that parents who believe their positive parenting efforts have little effect on promoting desired child outcomes tended to more strongly endorse the use of strict discipline as a means of controlling children's behavior. Alternatively, parents who believed parenting has a strong affect child outcomes were those who endorsed love, affection, and modeling as important contributions to children. It is possible that those parents who strongly believe parenting effects children would be more likely to talk to their children about their misbehaviors or use other non-physical techniques instead of immediately reacting to their child's misbehavior with physical discipline.

Examining the role of attitudes in the intergenerational transmission of physical punishment is vital since remembered affect may be a powerful factor in deterring physical punishment practices from being carried forward. It is likely that negative attitudes about physical punishment may result from negative memories associated with having experienced physical punishment during childhood. It is hypothesized that

encouraging parents to recall how they were parented could be an effective catalyst in promoting beliefs which are different from those endorsed by their parents. Further research is needed to understand how parental attitudes and values that differ from those of their parents may lead to changes in discipline strategies from one generation to the next.

Role of parental stress and support. Another mechanism that is likely to influence the intergenerational pathway of physical punishment is parents' levels of stress. According to Belsky's process model of parenting, the combination of parental attributes, child characteristics, and contextual sources of support and stress are the primary determinants of parenting (Belsky, 1984). Parenting stress refers to a parent's perception of whether he or she has sufficient resources to carry out the demands of parenting (Muslow, Caldera, Pursley, Reifman, & Houston, 2002). Stress can arise from many areas, including negative life events, marital discord, isolation, anxiety, depression, low income, daily hassles, and single parenthood. All of these can affect parent functioning (Webster-Stratton, 1990) which, in turn, affects parenting practices.

Parental stress has been found to be positively associated with punitive or harsh parenting practices (Crnic & Greenberg, 1987; Crouch & Behl, 2001, Martorell & Bugental, 2006; Webster-Stratton, 1988), with physical punishment (Garvey, Gross, Delaney, Fogg, 2000; Pinderhughes, Dodge, Bates, Pettit, & Zeli, 2000; Rodriguez & Green, 1997), as well as with punitive attitudes among mothers with one-year-old infants (McCurdy, 2005). Marital status is also linked to parent's levels of stress. Single parents often experience high levels of stress, which influences their parenting practices. Forgatch, Patterson, and Skinner (1988) confirmed that the effects of mothers' post-

separation stress on their children, such as having significantly more minor hassles and increased major life events, was mediated by the effects of inept parent discipline practices. However, O’Leary and Emery (1984) have argued that it is more critical to examine the relative effects of the interpersonal marital process (marital conflict vs. support) rather than family structure (single vs. intact). This idea was further corroborated in a study by Nobles and Smith (2002). They found that while single mothers were at greater disadvantages because they had lower levels of social support and income than partnered mothers, they did not punish their child more frequently or more severely. This indicates that children in single-parent homes are not always a risk group for harsh or abusive parenting, implying that single-parents have the capacity to change as well. As such, parents’ level of stress is what is important when examining whether physical punishment practices are carried forward, not necessarily their partnering status. Further investigation is needed to clarify the mixed reports on the contributions partnering stress may have on parents since this is likely to influence whether physical punishment practices are carry forward or not.

Another way in which stress is likely to influence physical punishment practices is through parental satisfaction. Crnic and Greenberg (1990) have reported that maternal perceptions of the stress caused by daily hassles with their five-year-old children were predictive of their satisfaction with their parenting role. In the Sherman (1997) report, parents’ increased satisfaction with their role as a parent allowed those parents to move away from using physical punishment.

Factors outside the family may also influence parents' levels of stress. Stress has been linked with socioeconomic status with many researchers finding that the percentage of parents using physical punishment is highest among those with low SES (Giles-Simes et al., 1995; Straus & Stewart, 1999). McCurdy (2005) examined stress, as indicated by entering and leaving public assistance, in single mothers with children. Increased stress corresponded to more punitive punishment attitudes for the full sample of mothers.

Moreover, increased support from the mothers' partner and/or her informal network (i.e., family and friends) may help to reduce punitive attitudes towards the child. Ceballo and McLoyd (2002) documented that when mothers had access to greater amounts of support, they were less likely to rely on punitive punishment strategies. Cross-cultural research finds significant correlations between maternal social support and parenting behavior with lower amounts of social support corresponding to more punitive behavior (Chan, 1994). Further support lies in McCurdy's (2005) report where mothers received home visits from representatives in a Healthy Start program. Overall positive changes in the stress and support variables had a greater impact on mother's punitive attitudes towards childrearing than maternal psychosocial functioning. Specifically, an increase in partner support produced a significant decrease in mothers' potential to be punitive or abusive when making discipline decisions. These results suggest that in addition to stress, parents' levels of social support may be important in determining whether physical punishment practices continue across generations or not.

Despite empirical evidence documenting that parents' levels of stress and support contribute to physical punishment, few reports have included these as variables when

examining intergenerational patterns of parental behaviors. In an older report, Carroll (1977) described how respondents who had grown up in an environment characterized by either low family warmth or high stress combined with a high degree of parental punishment were more likely to use physical punishment with their own children. Future investigations must examine childhood punishment histories as well as parents' current level of stress in order to predict whether patterns of physical punishment will be carried forward, or if parents are able to change. It is likely that when stressors outweigh support, there is an increase in the probability of physical punishment, thus perpetuating the cycle of physical punishment across generations.

It is also important to examine the role stress plays in combination with attitudes about physical punishment. Crouch and Behl (2001) show how the association between stress and physical child abuse potential may be moderated by parents' beliefs or positive attitudes about physical punishment. In their report, among parents who held strong positive attitudes about using physical punishment, level of stress was positively associated with physical abuse potential. Alternatively, level of parenting stress was not associated with physical abuse potential among parents who did not have strong positive attitudes about using physical punishment.

While the aforementioned report focused on child *abuse* potential versus child *physical punishment* potential, the results may be helpful in understanding discontinuity across generations in physical punishment practices. For instance, a parent who experienced physical punishment during their childhood, may have negative attitudes about its use with their own child, but may still use such punishment practices in stressful

contexts. Disciplining situations in which parents are also experiencing large amounts of stress might increase the chance that parents will exhibit behaviors that contradict attitudes about physical punishment. As a result, the intergenerational transmission of physical punishment might be expected to continue. Perceived support in the parental role may act as a buffer, reducing the likelihood that the intergenerational transmission of physical punishment will occur. Further investigation is needed to examine these ideas.

The link between parents' levels of stress and parents' disciplinary actions in response to their children's misbehavior may be mediated by the cognitive-emotional processes in parents when their child misbehaves. For instance, parents who experience high degrees of stress are likely to be presented with situations that undermine their emotional state (McLoyd, 1990). As a result, highly stressed parents may believe they have less parental control over their child misbehavior. Differing degrees of perceived control may lead to differing emotional reactions to defiance and thus different discipline responses (Dix, 1991). Given this, low parental stress would be associated with better emotion regulation. Conversely, parents with higher degrees of perceived stress are less likely to regulate their emotions. This association is likely to be transmitted into parenting behaviors, particularly discipline responses. As a result, in addition to attitudes and stress, examining parents' abilities to regulate their emotions is another factor likely to influence the intergenerational transmission of physical punishment.

Role of negative emotion and emotion regulation. Although attitudes and stress may be important variables likely to influence behavior, how an individual expresses their emotions, most notably anger, may be just as or more important. Dix (1991) argued

that understanding parental emotions is essential to understanding parenting behavior. No matter how temperamentally agreeable a child is or how patient a parent is, feelings of negative affect are common. Researchers who study the association between emotion and behavioral responses claim that once activated, emotions transform people's orientations toward the environment, a set of processes Dix (1991) calls engagement processes. Individuals who underregulate their emotions often become so overwhelmed by their emotions that they are unable to control them and are unable to focus on finding a solution to their distress. An important link may exist between certain emotional responses and the inability to control these, and the selection of physical punishment practices, as opposed to other forms of discipline. As a result, investigation should include understanding the role emotional regulation skills operate when parents respond to their child's misbehavior.

Emotion regulation is generally defined as the ability to express appropriate emotional in a given situation. Appropriately regulating one's emotions involves actively coping with emotions and expressing them in socially acceptable ways (Thompson, 1994). Examples of emotion regulating strategies include self-soothing, reframing upsetting events (Schwartz & Proctor, 2004) and or inhibiting emotionally driven behavior (Eisenberg, Gershoff, Fabes, Shepard, Cumberland, Losoya, Guthrie, & Murphy, 2001). An example parents could employ would be talking with to their child and letting them know how their behaviors made them feel.

Conversely, negative emotion expression would include acts such as yelling, overt expressions of anger, and physical threats and punishment. Anger is perhaps the most

prominent negative parental emotion linked to physical and harsh discipline. Physical punishment is used most often when parents are angry (Jackson, Thompson, Christiansen, Colman, Wyatt, & Buckendahl, 1999; Peterson, Ewigman, & Vandiver, 1994) or lose control of their emotions (Straus, 1996). Straus and Mouradian (1998) compared impulsive versus controlled spanking. While spanking was administered in both groups of parents, the associations between physical punishment and child antisocial behavior were stronger when mothers reported having spanked impulsively rather than in a controlled manner. Similarly, another report highlighted links among respondents high on physical punishment use with their own negativity (Thompson, Christiansen, Jackson, Wyatt, Colman, Peterson, Wilcox, Buckendahl, 1999). Such respondents were also high on neglect, verbal abuse, and attitudes that devalue children. They reported childhood abuse and domestic violence, marital difficulty, and problems managing anger.

Even non-abusive parents recommend using more negative parental responses to child misbehavior when they are angry (Dix, Reinhold, & Zambarano, 1990). A separate report had mothers view videotapes of their interactions with their toddlers and continuously rate their emotions experienced at that moment. Harsh discipline was associated with mothers' greater negative emotion intensity (Lorber & Slep, 2005). Some reports find slightly different associations with anger and physical punishment. For instance, Peterson, Ewigman, and Vaniver's (1994) found that although anger may influence the amount or intensity of verbally aggressiveness and physical discipline, it did not appear to influence strongly *choice* of disciplinary strategy. Interestingly though,

maternal anger did correlate with a higher proportion of maternally perceived behavior problems in their children.

While the relationship between anger and parental practices has not been clearly delineated, the existing literature does suggest a link between expressing anger and physical, often harsh, punishment. In fact, in Kolko's (1996) study, parental anger was identified as a key variable in monitoring the clinical course of maltreating families seeking treatment help. The ability to control one's own negative emotions before implementing a discipline strategy is likely to affect whether parents will repeat physical punishment practices similar to those they experienced as a child.

Despite the progresses made in understanding the transmission of physical punishment across generations, little investigation has systematically examined the role of emotional regulation in combination with attitudes about physical punishment and parental stress. While each has been shown to contribute to parents' current use of physical punishment, it is unclear whether such factors would be significant when looking at changes over generations as well in combination with each other. For instance, it is likely that a parent may have a negative attitude about the use of physical punishment, despite having received a childhood history of such practices, but still physically discipline their child. There is growing research which suggests that while attitudes usually predict behavior, it is not a guarantee. Previous research has shown a number of factors may moderate the attitude-behavior relationship, including, but not limited to, the match between the affective and cognitive components of an attitude (Chaiken & Baldwin, 1981) and the match between the affective or cognitive component

and the overall evaluation (Eagly & Chaiken, 1998). It is likely that those parents who use physical punishment, despite holding negative attitudes about its use, may be experiencing high levels of stress, which affects their ability to regulate their emotions. Conversely these parents may simply have difficulty regulating their anger when their child misbehaves. Poor emotion regulation abilities, either alone or in combination with attitudes and stress may hinder parents' abilities in moving away from punishment practices experiences during childhood. Because little research has been conducted on change across generations in parenting practices as a result of changes in parents' abilities to regulate anger, this will be a goal of the proposed study.

Summary of the Present Study

The present study is designed to understand the processes behind the intergenerational transmission of physical punishment. Of particular interest are the contributing factors of attitudes, stress, and negative emotions play within this intergenerational transmission. Throughout this paper, it was argued that parents' past childhood experiences, attitudes about physical punishment, parents' levels of stress, as well as their ability to regulate their emotions are likely to predict parents current discipline techniques. Furthermore, it is also likely that interactions among these variables are responsible for current punishment practices. For instance, a parent may have a childhood history of physical punishment experiences, but not currently use physical punishment with their child, perhaps because of factors related to physical punishment use (e.g., stress or anger).

With regard to change, it is hypothesized that the variables mentioned above may predict parents who repeat childhood practices and those who do not. Figure 1 displays the different relations among parents past childhood history and what they currently do. Groups B and C represent parents who show a change from their past experiences during childhood in terms of physical discipline. While both groups of parents show change, the change which is of particular interest for the proposed study is that of parents in group C. If the factors mentioned above do have an impact, either alone or in combination with each other, an additional goal of this study is to investigate differences among parents who repeat childhood practices and those who do not. Analyses will include parents' attitudes towards physical punishment, levels of angry, emotional regulation skills, stress and one's ability to cope with stress as predictors on which parents changed and which parents repeat childhood practices.

Figure 1. Physical punishment practices across generations

<p style="text-align: center;">A</p> <p>Parents who <u>did not receive</u> physical punishment as a child and who <u>do not currently</u> physically punish their own children</p>	<p style="text-align: center;"><u>C</u></p> <p>Parents who <u>did receive</u> physical punishment as a child and who <u>do not currently</u> physically punish their own children.</p>
<p style="text-align: center;">B</p> <p>Parents who <u>did not receive</u> physical punishment as a child and who <u>do currently</u> physically punish their own children.</p>	<p style="text-align: center;"><u>D</u></p> <p>Parents who <u>did receive</u> physical punishment as a child and who <u>do currently</u> physically punish their own children.</p>

In addition to examining group differences among parents, an additional goal of this study is to examine within generational differences between parents and their parents

(the grandparent) in attitudes about physical punishment, anger, ability to regulate anger, stress, and ability to cope with stress. Considering both groups of participants are parents, generation one (G1) refers to the parent of the adult child (the grandparent) while generation two (G2) refers to the adult child who currently has a child (G3) between the ages of two and six. For all generation one analyses, socio-economic status will be entered as a covariate. Based upon the previously reviewed literature, the following research questions and hypotheses are proposed

Principle Questions and Hypotheses

Research question #1: Does one's experience during childhood, their attitudes about physical punishment, as well as one's current level of stress and negative emotions have an impact parent's current parenting practices when responding to their child's misbehavior?

Hypothesis #1: Physical punishment experiences during childhood will predict current physical punishment use.

In order to test this hypothesis, a regression will be conducted in which parents' (G2) reports of: 1) having received physical punishment during childhood, 2) how important physical punishment was as a primary child-rearing procedure was, 3) how effective physical punishment was at teaching them something of importance, as well as 4) how much resentment they felt about having received physical punishment will each be entered as independent variables. Parents' reports of currently using physical punishment will be entered as the dependent variable. Additionally, grandparents' (G1)

reports of receiving physical punishment will be entered as an independent variable and parent's reports of receiving physical punishment will be entered as the dependent variable. This will help highlight the intergenerational transmission of physical punishment by determining if parent's physical punishment experiences during childhood predict how parent's currently respond to their child's misbehaviors.

Hypothesis #2. While childhood experiences are hypothesized to be related to what parents (G2) current physical punishment use, physical punishment practices are actually changing over generations with today's parents less likely to use physical punishment on their own child.

In order to test this hypothesis, a multi-level model for change will be conducted to determine whether change physical punishment practices are changing over generations. In doing such an analysis, current physical punishment practices will remain a continuous score allowing for a stronger test of change. Thus, the rate of change in discipline practices will be conditional upon generational status.

Hypotheses #3: Parent's favorable attitudes about physical punishment will predict physical punishment use.

In order to test this hypothesis, a regression will be conducted in which parents' (G2) attitudes about physical punishment will be entered as an independent variable and parent's reports of currently using physical punishment will be entered as the dependent

variable. This will help determine if parent's attitudes about physical punishment predict how parents currently respond to their child's misbehaviors.

Hypothesis #4: Parent's anger and their ability to regulate anger will predict physical punishment use. Specific predictions about change over generations about physical punishment are made based on changes in anger as well as changes in ability to regulate anger.

Hypothesis #4a. Parents who show low levels of anger will be less likely to use physical punishment practices with their own child than G2 parents who show high levels of anger. In order to test this hypothesis, a regression will be conducted in which parent's (G2) level of anger will be entered as an independent variable and parent's report of currently using physical punishment will be entered as the dependent variable. This will help determine if parent's current level of anger predicts how parents currently respond to their child's misbehaviors.

Hypothesis #4b. Parents who show more effective anger regulation strategies will be less likely to use physical punishment practices with their own child than G2 parents who show less effective anger regulation strategies. In order to test this hypothesis, a regression will be conducted in which parents' (G2) reports on the amount of strategies used to regulate their anger will be entered as an independent variable and parents' reports of currently using physical punishment will be entered as the dependent variable. This will help determine if parent's abilities to regulate anger predict how parents currently respond to their child's misbehaviors.

Hypothesis #5: Parent's stress and their ability to cope with stress will predict physical punishment use.

Hypothesis #5a. Parents who show low levels of stress are less likely to use physical punishment practices on their own children than G2 parents who show high levels of stress. In order to test this hypothesis, a regression will be conducted in which parent's (G2) level of stress will be entered as an independent variable and parent's report of currently using physical punishment will be entered as the dependent variable. This will help determine if parent's amount of perceived stress predicts how parents currently respond to their child's misbehaviors.

Hypothesis #5b. Parents who show more strategies for coping with stress are less likely to use physical punishment on their own children than G2 parents who show fewer stress coping strategies. In order to test this hypothesis, a regression will be conducted in which parents' (G2) stress coping strategies will be entered as an independent variable and parent's report of currently using physical punishment will be entered as the dependent variable. This will help determine if parent's stress coping strategies predicts how parents currently respond to their child's misbehaviors.

Research question #2: When considered in tandem, are there interaction effects between the hypothesized variables when predicting how parents currently respond to their child's misbehaviors?

Hypothesis #6. While childhood experiences is hypothesized to be related to parent's current discipline strategies, attitudes about physical punishment, stress, levels of

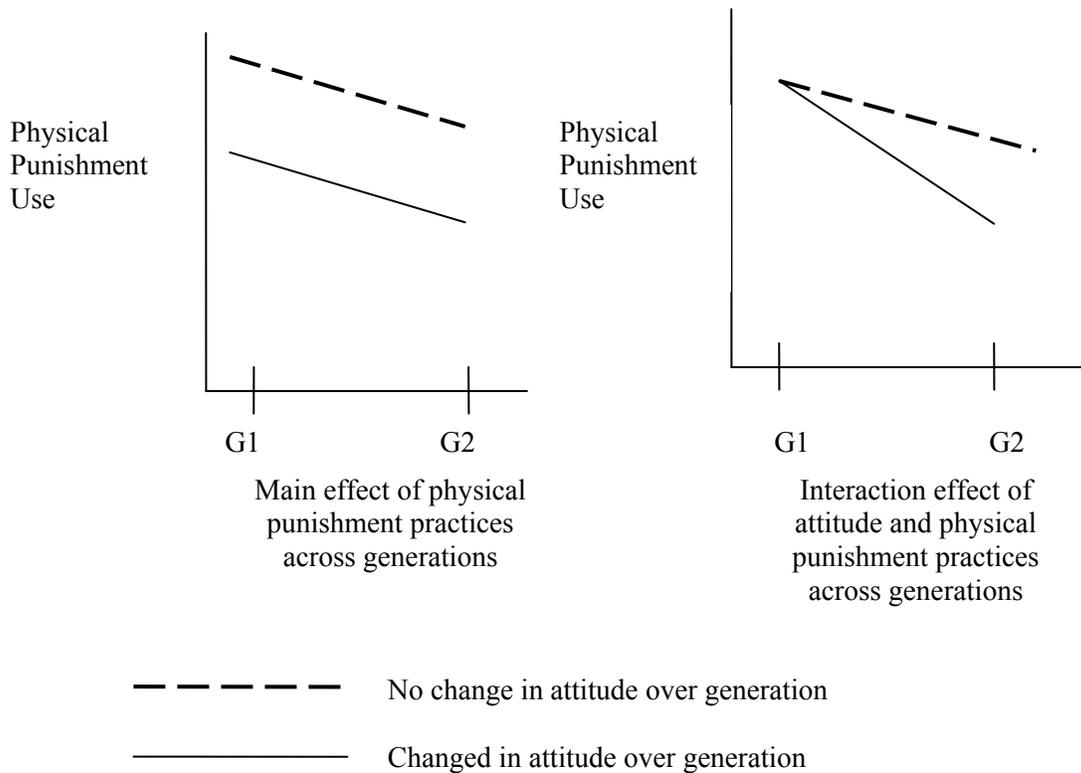
anger, and strategies for handling stress and anger will modify the transmission of physical punishment. Specific predictions about change over generations in physical punishment are made based on the hypothesized predictor variables.

Hypothesis #6a. Parents who have more favorable attitudes towards physical punishment will be more likely to use physical punishment with their own children, thus repeating their experiences of childhood physical punishment. In order to test this hypothesis, a hierarchical regression with two independent variables will be conducted. In the first step, parent's (G2) reports of having received physical punishment during childhood will be entered and parents' (G2) attitudes about physical punishment will be entered as a second step. Parent's (G2) report of currently using physical punishment will be entered as the dependent variable. This will help determine if parent's attitudes about physical punishment modifies the transmission of childhood experiences and what parents currently do when respond to their child's misbehaviors. For instance, a parent might have experienced a childhood characterized as high in physical punishment, but nonetheless not use physical punishment practices with their own child because they have less favorable attitudes about physical punishment than those parents who repeat childhood practices with their own child.

To investigate further the extent to which attitudes influence physical punishment practices across generations, a multi-level model for change will be conducted to determine whether change in physical punishment practices between parents is a result of attitudes towards physical punishment. Thus childhood experiences and current attitudes will both be entered as predictors when looking at current physical punishment use. In

doing such an analysis, current physical punishment practices will remain a continuous score allowing for a stronger test of change. Thus, the rate of change in discipline practices will be conditional upon the slope or change, in attitudes between parents. The results will highlight the added contribution, if any attitudes play in predicting current physical punishment use above the influence of having received such practices as a child. The hypothesis is illustrated in Figure 2.

Figure 2. Hypothesis #6a example



Hypothesis #6b. Parents who show more feelings of everyday anger will more likely use physical punishment with their own child and thus more likely to repeat their

childhood experiences of physical punishment. In order to test this hypothesis, a hierarchical regression with two independent variables will be conducted. In the first step, parent's (G2) reports of having received physical punishment during childhood will be entered and parent's (G2) level of anger will be entered as a second step. Parent's (G2) reports of currently using physical punishment will be entered as the dependent variable. This will help determine if parent's degree of expressing anger modifies the transmission of childhood experiences and what parents currently do when responding to their child's misbehaviors. For instance, a parent might have experienced a childhood characterized as high in physical punishment, but nonetheless not use physical punishment practices with their own child because they are less angry than those parents who repeat childhood practices with their own children.

To investigate further the extent to which anger influences physical punishment practices across generations a multi-level model for change will be conducted to determine whether change in practices between parents is a result of feelings of anger. Thus childhood experiences, current attitudes, and feelings of anger will be entered as predictors when looking at current physical punishment use. In doing such an analysis, current physical punishment practices will remain a continuous score allowing for a stronger test of change. Thus, the rate of change in discipline practices will be conditional upon the slope or change, in anger between parents.

Hypothesis #6c. Parents who are less capable of regulating their everyday feelings of anger will be more likely to use physical punishment with their own children, thus repeating their childhood physical punishment experiences.

In order to test this hypothesis, a hierarchical regression with two independent variables will be conducted. In the first step, parent's (G2) reports of having received physical punishment during childhood will be entered and parent's (G2) ability to regulate their anger will be entered as a second step. Parent's (G2) reports of currently using physical punishment will be entered as the dependent variable. This will help determine if parent's abilities to regulate negative emotions when they arise modifies the transmission of childhood experiences and what parents currently do when respond to their child's misbehaviors. For instance, a parent might have experienced a childhood characterized as high in physical punishment, but nonetheless not use physical punishment practices with their own child because they are more capable at regulating negative emotions than those parents who repeat childhood practices with their own children.

To investigate further the extent to which a person's ability to regulate their anger influences physical punishment practices across generations, a multi-level model for change will be conducted to determine whether change in practices between parents is a result of abilities to regulate anger. Thus childhood experiences, current attitudes, feelings of anger, and how a parent regulates their anger will be entered as predictors when looking at current physical punishment use. In doing such an analysis, current physical punishment practices will remain a continuous score allowing for a stronger test of change. Entering emotional regulation ability with the addition of the other predictors looks at the contributions of emotion regulation skills when predicting physical

punishment. Thus, the rate of change in discipline practices will be conditional upon the slope or change, in abilities to regulate negative emotions between parents.

Hypothesis #6d. Parents who show more stress will be more likely to use physical punishment with their own children, thus repeating the physical punishment practices from childhood.

In order to test this hypothesis, a hierarchical regression with two independent variables will be conducted. In the first step, parent's (G2) reports of having received physical punishment during childhood will be entered and parent's (G2) level of stress will be entered as a second step. Parent's (G2) reports of currently using physical punishment will be entered as the dependent variable. This will help determine if parent's degree of experiencing stress modifies the transmission of childhood experiences and what parents currently do when responding to their child's misbehaviors. For instance, a parent might have experienced a childhood characterized as high in physical punishment, but nonetheless not use physical punishment practices with their own child because they less often feel stressed than those parents who repeat childhood practices with their own children.

To investigate further the extent to which a person's stress level influences physical punishment practices across generations, a multi-level model for change will be conducted to determine whether change in practices between parents is a result of feelings of stress. Thus childhood experiences, current attitudes, feelings of anger, how a parent regulates their anger, and stress will be entered as predictors when looking at current physical punishment use. In doing such an analysis, current physical punishment

practices will remain a continuous score allowing for a stronger test of change. Thus, the rate of change in discipline practices will be conditional upon the slope or change, in stress between parents.

Hypothesis #6f. Parents who are less capable of coping with stress will be more likely to use physical punishment with their own child, thus repeating the physical punishment practices from childhood. In order to test this hypothesis, a hierarchical regression with two independent variables will be conducted. In the first step, parent's (G2) reports of having received physical punishment during childhood will be entered and parent's (G2) ability to cope with stress will be entered as a second step. Parent's (G2) reports of currently using physical punishment will be entered as the dependent variable. This will help determine if parent's degree of coping with stressful events modifies the transmission of childhood experiences and what parents currently do when responding to their child's misbehaviors. For instance, a parent might have experienced a childhood characterized as high in physical punishment, but nonetheless not use physical punishment practices with their own child because they are more able to cope with stressful situations than those parents who repeat childhood practices with their own children.

To investigate further the extent to which a person's ability to cope with stress level influences physical punishment practices across generations a multi-level model for change will be conducted to determine whether change in practices between parents is a result of changes in abilities to cope with stress. Thus childhood experiences, current attitudes, feelings of anger, how a parent regulates their anger, stress, and how they cope

with stress will be entered as predictors when looking at current physical punishment use. The addition of coping with stress with the other variables will examine the contributing factors of stress coping. In doing such an analysis, current physical punishment practices will remain a continuous score allowing for a stronger test of change. Thus, the rate of change in discipline practices will be conditional upon the slope or change, in coping with stress between parents.

CHAPTER THREE

Method

Participants

This study used questionnaire data from parents and their parents, both of which were collected by the researcher. Eligibility requirements for parents were that they were at least 18 years of age, had a child who was between the ages of 2 through 6 years old, and could read and write English. Parents had the option to invite their parent to also participate. The eligibility requirement for grandparents was also that they read and write English.

The sample consisted of 211 parents. Of the parents that participated, 105 parents allowed one of their parents (the grandparent) to be contacted by the researchers to participate in the study. Of the grandparents that were contacted and responded, 43 completed a hard copy of the questionnaires and 21 completed the questionnaires online for a total of 64 parents. Four grandparent questionnaire packs were returned undeliverable either through the mail or a bad email address and three grandparents declined to participate.

While both mothers and fathers as well as grandmothers and grandfathers were invited to participate, the majority of parent respondents were female ($N = 220$) versus male ($N = 6$) and there were 63 grandmothers, and 2 grandfathers. The mean age of the grandparents was 60.2 years-old with a range of 49 to 75, while the mean age for parents was 33.8 with a range of 23 to 50. For grandparents, 38.8% had finished college, while 12.5% had only finished high school. For parents, however, 36.1% had finished college,

while 32.7% had a graduate level education. The majority of the grandparents were married (68.8%) and of Caucasian descent (91.7%). Similarly, the majority of the parents were married (80.5%) and of Caucasian descent (76.6%). However, approximately 8.6% of the parents were Latino, 5.6% Asian-American, 4.1% African-American, 1.5% Native-American, or 3.0% listed “other ethnic background.” Most grandparents resided in a home with a household income of over \$80,000 (42.2%), though many had a household income of \$40,000-\$60,000 (22.1%). The largest group of parents had a household income of over \$80,000 (39.9%), though many also had a household income of \$40,000-\$60,000 (18.2%). For parents, the household income breakdown was the following: 9.6% had a household income of up to \$20,000, 14.8% had an income of \$20,001-\$40,000, 15.7% had an income of \$40,001-\$60,000, 10.9% had an income of \$60,001-\$80,000, and 35.2% had an income over \$80,000. Income information was missing for 13.9% of the parents.

Procedure

Parents were recruited from local childcare centers, the University of Texas Child and Family Laboratory School, and online parenting forums. Additionally, some parents participating in this study were also participating in a separate parenting education program conducted at the University of Texas. For this group of parents, the participants were asked to complete the self-report questionnaires necessary for the current report before they participated in the parenting education program. For those that were recruited from childcare centers and the Child and Family Laboratory, permission to approach parents was obtained first from each organization’s director. All eligible parents received

a flyer detailing the study goals, requirements, and instructions on how to participate (Appendix A). Interested parents had 3 options to complete the questionnaires: 1) online, 2) a hard copy either completed at that present time or mailed to them with return envelope and postage, or dropped off at their child's center with instructions to return it to the sealed box in the director's office, or 4) over the phone.

Parents were also recruited from online parenting forums, such as cafemom.com and mommytalk.com. On each parenting forum there was a brief advertisement blog about the study. If parents were interested, they were instructed to click the provided web link to surveymonkey.com which directed them to the study consent form where they had the option to request a hard copy of the questionnaires or continue and complete the questionnaires online. Nearly all of the parents regardless of recruitment method completed the questionnaires online ($N = 204$) via surveymonkey.com, an internet survey designer and collector with a few completing a hard copy of the questionnaires ($N = 7$). No parents chose to complete the questionnaires over the phone. All parents who completed the questionnaires, regardless of method, were entered into a drawing for a chance to win prizes, such as gift cards to local grocery stores and restaurants.

Parents served as the gatekeepers of their parent's (the grandparent) contact information. Parents were not required to give out their parent's contact information and their participation was still welcomed regardless. Parents who did not invite their parent to participate were prompted to provide a reason (e.g., their parent(s) are deceased, their parents do not read/write English, or other reasons and then prompted to provide a brief response). Though some participants did not answer this question, the majority of parents

did not invite their parents for other reasons, stating responses such as: “My parents are old and would not understand this study,” “I do not want to bother my parents with this.”

If parents wanted their parent to be invited to participate in this study, they provided either a mailing address, phone number, and/or e-mail. If parents provided a mailing address, a letter was sent to their parent explaining the project, along with a consent form, as well as a questionnaire pack. Additionally, grandparents were provided a stamped envelope to return the consent form and complete questionnaire pack. If parents provided an email address, a letter introducing the researcher and explaining the study which their son or daughter also participated was emailed to them. Included in this email was a web link to the study’s consent form and questionnaires. This initial email also gave grandparents the option to contact the researcher, either through email, phone, or postal mail if they desired to complete a hard copy of the consent form and questionnaires. If both a postal address and email address were given, the grandparent was initially contacted by email, and if there was no response, then a hard copy of the questionnaire pack was mailed. If grandparents did not respond to either invitation, then they were not contacted again.

Both parents and grandparents completed a questionnaire pack. Questionnaire packs were mailed to participants with an ID number only and were asked to not put any identifying information on the completed questionnaires. If participants completed an electronic questionnaire pack, their answers were printed without any identifying information and also given an ID number. Each questionnaire pack contained eight questionnaires which are presented in this study, including: background information, past

childhood and current discipline techniques, stress and abilities to cope with stress, anger and abilities to regulate anger, as well as questions assessing parenting style and efficacy. Questionnaires concerning current discipline techniques were omitted from grandparent's packs. Data obtained from both parents and grandparents was used in this study.

After over half of the parents had participated in the study, the background questionnaire was modified to include a set of open-ended data. These questions arose after data collection had begun when it was apparent that parents *were* doing things differently than the way their parent parented them.

Measurement

Background information. (APPENDIX B) In addition to standard demographic information, parents were asked a few questions concerning current parenting practice in their home as well as change. For example, parents were asked whether they and their spouse, or child's other parent agree on discipline techniques and if not, what does the other parent do which is different. The purpose of these questions was the idea that some parents may change their discipline behaviors, but nonetheless still allow other techniques to be used on their child. Additionally, parents were asked questions concerning change across generations as well as their perceptions of change. The purpose of these questions was to get a better understanding of what change is as well as how parents perceive change. For example, some parents may say they are different than their parent, but are unable to describe how. Additionally, change may have occurred in distinct ways. Firstly, some parents may parent differently because they actively strived to do things differently than their parent, either through professional/outside help or

before having a child. Secondly, other parents exhibit different parenting techniques than those during their childhood, but their change was more unconscious and just happened.

Current physical punishment use. (APPENDIX C) A 20-item Current Parenting Practices Scale developed for the current project was used to assess the range of responses parents currently use when responding to their child's misbehavior. For this report, only items related to physical punishment were used and such items have been marked with an asterisk in Appendix D. Sample items included: "How often do you use open-handed spanking confined to your child's buttocks?", "How often do you use objects when disciplining your child? For example, a belt?", and "How often do you grab your child's arm?" Participants rated how often they used each technique using a 7-point Likert scale ranging from 1 (never) to 7 (always) for 18 items and then write their responses on two open-ended questions about what discipline techniques they most use and why they think a parent might use physical punishment. The full Current Parenting Practices Scale had a Cronbach's alpha of 0.75, however, the subset specific to physical punishment use had a Cronbach's alpha of 0.73.

Childhood discipline practice. (APPENDIX D) A total of 22 questions were taken from the Discipline Questionnaire (DQ; Graziano, Hamblem, & Plante, 1990). Originally 43 items in length, of interest is part II of this questionnaire which assessed participants' retrospective reports particular to physical punishment. Sample items include: "How important was physical punishment as a primary child-rearing procedure in your family?" and "How much resentment did you usually feel about being punished?" Participants rated the degree to which each of the 22 items characterized their childhood

using a 5-point Likert scale. Items where participants responded by designating “I don’t know” or “I can’t remember” were omitted from analyses.

Attitudes about discipline. A 10-item Attitude Towards Spanking (ATS; Holden, 1995) (APPENDIX E) was used for assessing participants’ overall attitudes towards the effectiveness and appropriateness of specifically spanking. Sample items included: “Spanking is a normal part of parenting” and “Generally, spanking is harmful for a child.” Participants rated how much they agree or disagree with the statements using a 7-point Likert scale. The possible range of scores is from 10-70. When the author designed this scale, the median Cronbach’s alphas ranged from .89 to .91 for 5 independent samples of parents. Test-retest correlations over a 3-week period averaged .76 for a sample of 20 mothers. The author assessed the validity of the scale through the correlation of subjects’ scores with their reported weekly rates of spanking, $r = .73$. For this report, Attitudes towards Spanking had a Cronbach’s alpha of 0.45.

A total of 19 questions were taken from the Discipline Questionnaire (DQ; Graziano, et al., 1990) (APPENDIX D, Part II). Originally 43 items in length, of interest is part III of the original questionnaire which assesses participants’ current attitudes about physical punishment. This differs slightly from Attitude Towards Spanking (ATS; Holden, 1995) since this scale extends beyond just attitudes about spanking to include attitudes about other forms of physical punishment. Sample items include: “Parents should have the right to physically punish their children” and “How appropriate do you think arm twisting is?” “How appropriate do you think slapping is?” Participants rated their responses using a 5-point Likert scale. However, given the correlation between

attitudes towards spanking and attitudes towards physical punishment ($r = .87$), only Attitudes Towards Spanking was used in the main analyses as it is the questionnaire more commonly used in past research.

Levels of stress / Strategies for coping with stress. A 14-item Perceived Stress Scale (Cohen, Kamarck, & Marmelstein, 1983) was used to measure how unpredictable, uncontrollable and overloaded participants find their lives. This global measure can be used across the entire adult lifespan. A higher score on the scale represents participants' higher perceptions of stress. Possible scores range from 0-56. The scale has demonstrated adequate reliability with coefficient alpha reliability ranges from 0.84 to 0.86 (Cohen, Kamarck, & Marmelstein, 1983). Cronbach's alpha for the Perceived Stress Scale for this report was 0.39.

The scale was chosen for its relative ease to understand. Additionally, both parents of young children and grandparents, who are less active in childrearing, can complete this measure since it is not limited to questions pertaining to parenting stress. Sample items included: "In the last month, how often have you dealt successfully with irritating life hassles?" and "During the last month, how often have you felt nervous and stressed?" Respondents were asked to think about the last month and rate how often they feel a certain way using a 5-point Likert scale.

A total of 40 questions were taken from the Coping Orientation with Problem Experiences Inventory (COPE Inventory- Dispositional Form, Carver, Scheier, & Weintraub, 1989). Each item on the COPE inventory is framed in terms of what the participant usually does when dealing with stress. Respondents indicated how often they

used each of the coping strategies using a 4-point Likert Scale ranging from 1 (I usually don't do this at all) to 4 (I usually do this a lot). The original scale consisted of 60 items which generated 15 distinct scales. The scales which were not hypothesized to be related to physical punishment use and thus excluded from this study were the following: Turning to Religion, Denial, Humor, and Alcohol and Drug Disengagement. For each subscale of the full COPE inventory, Cronbach's alphas ranged from .92 to .62, with the exception of Alcohol and Drug Disengagement scale, which was not used in the present study (Carver et al., 1989). Evidence of both convergent and discriminant validity have also been reported for the COPE inventory as well as stable test-retest reliability (Carter et al., 1989).

The subset of 40 items chosen from the larger measure fell onto two distinct dimensions, problem-focused coping and emotion-focused coping, which were hypothesized in this study to aid parents in breaking the intergenerational cycle of physical discipline. Throughout the coping research, problem-focused coping has generally come to mean task-oriented efforts undertaken to manage or alter conditions. For the COPE inventory, Active Coping and Positive Reinterpretation and Growth scales were considered to represent problem-focused aspects of individualistic coping. Active Coping included taking direct action to deal with the problem (e.g., "I take additional action to try to get rid of the problem"). Positive Reinterpretation and Growth involved efforts to construe the stressful situation in a positive way (e.g., "I try to grow as a person as a result of the experience"). Alternatively, emotion-focused coping entails regulating or reducing emotional distress without direct confrontation of the stressor. For the COPE

inventory, Acceptance, Seeking Emotional Support, and Focus on and Venting of Emotions scales were considered to represent emotion-focused aspects of individualistic coping.

For this report, Cronbach's alpha for emotional-focused coping was 0.76, and Cronbach's alpha for problem-focused coping was 0.83. However, given the correlation between emotional-focused and problem-focused coping ($r = .60$) the two subscales were combined in this report for a total coping score. For this report, the full COPE inventory produced a Cronbach's alpha of 0.87.

Levels of anger / Ability to regulate anger. A 38-item Multidimensional Anger Inventory (MAI; Siegal, 1986) was used to measure participants' anger frequency, duration, magnitude, mode of expression, as well as a range of anger-eliciting situations. Frequency refers to how often an individual gets angry. Duration pertains to how long the individual remains angry. Magnitude refers to the relative intensity of the anger. Mode of expression refers to whether the individual tends to express anger openly (anger-out) or suppress it (anger-in). Finally, range of anger-eliciting situations refers to the typical range of circumstances in which the individual might become angry.

The MAI was developed and validated using a sample of 198 college students and 288 male factory workers in Pennsylvania and was shown to have similar factor structure for both samples (Siegal, 1986). Siegal also demonstrated convergent and divergent validity by correlating MAI factor scores with other anger measures. For example, the Anger Arousal subscale scale of the MAI correlated .23 and .34, $p < .01$ with Harburg, Blakeclock, & Roeper's (1979) Anger Duration and Anger Magnitude subscales

respectively. Siegel (1986) reported an internal consistency reliability coefficient of 0.89 for the MAI, and a three to four week interval test-retest reliability coefficient of 0.75. It has also been reported that the MAI has good construct validity with other valid measures of anger (Siegel, 1986). For this study, the MAI total score was used and had a Cronbach's alpha of 0.89.

This scale was chosen because anger evoking situations are not limited to those in the parental role. While there are other questionnaires assessing how often parents get angry, such scales would not be useful for the proposed study. The MAI can be completed by both current parents of young children and past parents of young children (the grandparent). The MAI is concerned with participants' feelings of anger in numerous everyday situations and not limited to ones specific to parenting a young child. Sample items included: "I tend to get angry more frequently than most people" and "When I am angry with someone, I take it out on whoever is around." Participants indicated how descriptive the statement of them is using a 5-point Likert scale ranging from 1 (undescriptive of me) to 5 (completely descriptive of me).

Effective anger regulation was measured using a modified version of the Difficulty in Emotion Regulation Scale, (DERS; Gratz & Roemer, 2004) with a higher score indicating more difficulty in regulating anger. Originally the scale consisted of 36 items on the difficulties of regulating emotions on six different dimensions: (a) lack of emotional awareness (6 items; e.g., "When I am upset, I acknowledge my emotions"), (b) nonacceptance of emotional responses (6 items; e.g., "When I'm upset, I feel guilty for feeling that way), (c) difficulties engaging in goal-directed behavior during experience of

negative emotion (5 items; e.g., “When I’m upset, I have difficulty concentrating”), (d) difficulties controlling behavioral impulses during experiences of negative emotion (6 items; e.g., “When I’m upset, I have difficulty controlling my behaviors”, (e) limited access to emotional regulation strategies (8 items; e.g., “When I’m upset, I believe that there is nothing I can do to make myself feel better”), and (f) lack of clarity in emotional responses (5 items; “I have difficulty making sense out of my feelings”). The DERS has good internal consistency ($\alpha = 0.90$), test-retest reliability, and acceptable construct and predictive validity in non-clinical adult samples (Gratz & Roemer, 2004).

The lack of clarity subscale assesses general lack of clarity and is not specific to negative affect. For the present study, the lack of clarity subscale was omitted, leaving only five negative affect subscales. Each subscale was reworded to reflect difficulties in regulating specifically anger. For example, items included: “When I’m angry, I acknowledge my emotions” and “When I’m angry, I feel out of control.” Participants responded to the 27-items using a 5-point Likert scale indicating how often the statement applied to them. Lower scores reflected less difficulty in regulating emotion (more effective emotion regulation); higher scores reflected greater difficulty in regulating emotion (less effective emotion regulation). The total score for the scale was used in this report and had a Cronbach’s alpha of .90.

CHAPTER FOUR

Results

Descriptive Statistics and Correlations

Descriptive information and correlations among variables for all parent participants are presented in Tables 1 and 2. Since this study assessed similarities and differences between two generations, for a subset of the sample the participant's parent (i.e., the grandparent [G1]) was included in the study. For this subset of families, descriptive information is presented in Table 3 and correlations among the variables are presented in Tables 4 and 5.

Preliminary Analyses

Preliminary analyses examined whether any of the variables were related to demographic information. ANOVA results indicate that for the full sample of parents, education level was related to the parents' attitude towards spanking, $F(3, 194) = 8.29, p < .001$. Parents with higher levels of education showed less favorable attitudes towards spanking ($M = 26.13$ for parents with graduate education vs. $M = 41.47$ for parents with only a high school education). Ethnicity was related to physical punishment practices, $F(6, 185) = 3.77, p < .01$, with African American parents reporting having used physical punishment more often ($M = 23.14$) than Caucasian parents ($M = 16.05$). Household income was uniquely related to physical punishment practices ($F(5, 186) = 2.36, p < .05$), attitudes towards spanking ($F(5, 188) = 2.92, p < .01$), and level of anger $F(5, 183) = 2.33, p < .05$). Compared to the other four income levels, parents who reported a household income of \$0 - \$20,000 were more likely to report using physical punishment

($M = 18.95$, $SD = 8.36$), more favorable attitudes towards spanking ($M = 38.55$, $SD = 18.87$), and higher levels of anger ($M = 108.79$, $SD = 24.98$). In contrast, parents whose household income was over \$80,000 reported lower amounts of physical punishment use ($M = 15.87$, $SD = 4.90$), the least favorable attitudes towards spanking ($M = 26.70$, $SD = 1.49$), and lower levels of anger ($M = 95.07$, $SD = 17.06$). Interestingly, parents who reported a household income of \$40,000-\$60,000 actually reported using physical punishment the least ($M = 14.31$, $SD = 3.64$) and reported the lowest level of anger ($M = 92.06$, $SD = 3.07$). Regression results indicate religiosity was marginally positively related to parents attitudes towards physical punishment ($\beta = .13$, $p < .10$). Moreover, parents' reports of satisfaction with their children's behavior were related inversely to their physical punishment practices ($\beta = -.23$, $p < .05$). Specifically, as parents' satisfaction with their children's behavior declined, physical punishment use increased. Parent's education level and the child's age were not related to any of the study variables.

For the subset of parents who were also participating in a parenting education program ($N = 50$), a large portion also invited their parent to participate in the current study ($N = 40$). Preliminary analyses investigated whether there were differences in any of the demographic variables and study variables between the group of parents who invited their parent to participate and the group that did not. T-test results indicated that parents who were older ($M = 35.10$ years, $SD = 4.50$) were more likely to invite their parent to participate than those who did not invite their parent to participate ($M = 32.82$ years, $SD = 6.42$), $t(115) = -2.37$, $p < .05$). Parents who invited their parent also had less favorable attitudes towards spanking ($M = 27.99$, $SD = 14.19$) than those who did not

invite their parent ($M = 34.39$, $SD = 17.00$), $t(207) = 2.97$, $p < .01$). Parents who invited their parent also were less likely to report having experienced physical punishment during childhood ($M = 2.18$, $SD = .86$) compared to those who didn't invite their parent ($M = 2.62$, $SD = 1.01$), $t(192) = -3.28$, $p = .001$). Additionally, parents who invited their parent to participate reported that physical punishment was less important as a primary child-rearing procedure ($M = 2.59$, $SD = 1.38$) compared to parents who didn't invite their parent ($M = 3.28$, $SD = 1.45$), $t(201) = -3.48$, $p = .001$). Finally, chi-square results indicate that parents who invited their parent had higher levels of education, $\chi^2(3, N = 202) = 26.12$, $p < .001$, and a higher household income, $\chi^2(4, N = 198) = 19.53$, $p < .01$. There were no differences in ethnicity, child's age or religiosity between the groups. None of the other study variables distinguished the two groups of parents.

Preliminary analyses also compared parents who were recruited from local childcare centers with parents who were recruited from online parenting forums. Though many parents who were recruited from childcare centers completed the questionnaires via an internet-based survey company, it was not readily apparent of all the parents initially recruited through national online parenting forums or the parents who resided in the local area and who were initially contacted via a flyer at their child's childcare center.

Approximately $N = 66$ parents who completed the questionnaires online also identified themselves as residing in the Austin, Texas area, thus those likely to have been recruited from local childcare centers. For this small identified group, these parents (who were not also participating in the parenting education program) were less likely to have favorable attitudes about physical punishment ($M = 29.54$, $SD = 14.90$) compared to parents who

were recruited from online parenting forums and thus more likely to live in areas other than Austin, Texas ($M = 37.48$, $SD = 16.78$, $t(117) = 2.73$, $p < .01$). Moreover, parents who identified themselves as living in the Austin, Texas area were more likely to be older ($M = 36.71$, $SD = 5.34$) compared to parents recruited outside of the area from online parenting forums ($M = 32.19$, $SD = 6.74$, $t(69) = 3.13$, $p < .01$). No other differences were found.

Main results

The following section provides the results for each hypothesis in this study. Hypotheses were tested using SPSS 16.0 and Hierarchical Linear Modeling (HLM) when permitted. Hypotheses were tested with HLM using pair parent-grandparent data ($N = 65$ dyads). To use these statistical procedures, all variables were left continuous. Furthermore, the slope or precise degree of change in physical punishment use stemming from each independent variable was determined. Household income and the parent's satisfaction with their child's behavior were controlled in all analyses using only the parent (G2) data.

Hypothesis # 1: Experiencing physical punishment during childhood will predict physical punishment use with one's own child.

Amount of physical punishment. Parents' (G2) reports of the amount of physical punishment they received during childhood was positively associated with using physical punishment with their own child, $\beta = .26$, $p < .001$, even after controlling for income and satisfaction with their children's behavior. Interestingly, parents (G2) who felt they were

spanked too much as a child were less likely to use physical punishment practices with their own child, even after controlling for income and satisfaction with their children's behavior, $\beta = -.19, p < .05$.

Using only grandparents' reports, regression results indicated that grandparents' (G1) accounts of having used physical punishment with their child (G2) in the past did not relate to their adult child's (G2) current report of physical punishment use with their own child (G3), $\beta = .18, p > .05$. Interestingly, there was no association between parents (G2) reports of having received physical punishment and their parents (the grandparents [G1]) reports of having used physical punishment with them during childhood ($r = .24, p > .05$).

Finally, grandparents' (G1) memories of having experienced physical punishment during childhood (i.e. the great-grandparents use of physical punishment) did not relate to parents (G2) memories of having experienced physical punishment during childhood ($\beta = .02, p > .05$). Moreover, grandparents' (G1) reports of receiving physical punishment during childhood did not relate to their reports of *using* physical punishment with their child (G2), $\beta = .24, p > .05$.

Since this study used information about physical punishment practices over three generations, the continuity of physical punishment from the grandparent's (G1) childhood to the grandchild (G3) was explored. Results indicated that grandparents' reports of receiving physical punishment as a child were not related to the amount of physical punishment their adult child (G2) used with their own children (G3), $\beta = .06, p > .05$.

Importance of physical punishment. The importance that parents' (G2) placed on the fact that their own parents used physical punishment as a primary child-rearing method positively influenced whether they used physical punishment with their child, $\beta = .22, p < .01$, even after controlling for parents' current income and satisfaction with their children's behavior.

However, when grandparents' (G1) reported how important physical punishment was as a primary discipline technique during their childhood, regression results indicated that this was neither related to their reports of using physical punishment on their own child (G2), $\beta = .15, p > .05$, nor to their adult child's (G2) memory of receiving physical punishment, $\beta = .14, p > .05$.

Effective in teaching. After controlling for parent's current income and satisfaction with their child's behavior, parents' (G2) memories of how effective physical punishment was in teaching them something of importance positively influenced the likelihood they would use physical punishment with their own child, $\beta = .23, p < .01$.

Grandparents' memories pertaining to the effectiveness of physical punishment as a teaching tool was neither related to their reports of using physical punishment with their own child (G2), $\beta = .21, p > .05$, nor to their adult child's (G2) memories of the frequency with which they were physical punished, $\beta = .19, p > .05$.

Resentment in physical punishment. After controlling for income and parents' satisfaction with their child's behavior, parents' (G2) feelings of resentment towards receiving physical punishment did not negatively influence using physical punishment with their own child, $\beta = -.03, p > .05$. However, after controlling for the amount of

physical punishment, as well as income and satisfaction with their child's behavior, feelings of resentment towards receiving physical punishment did negatively influence whether parents (G2) physical punished their own child $\beta = -.20, p > .05$. Interestingly, parents scoring high (+ 1 SD above the mean, $N = 26$) vs. low (-1 SD below the mean, $N = 26$) on current physical punishment use did not differ on their level of resentment about being physically punished during childhood. However, parents who had strong feelings of resentment about being physically punished during childhood (+ 1 SD above the mean, $N = 56$) were spanked more during childhood ($M = 2.92, SD = 1.03$) as compared with those who had low levels of resentment (- 1 SD below the mean, $N = 59, M = 2.20, SD = 1.06$), $t(109) = -3.91 p < .001$.

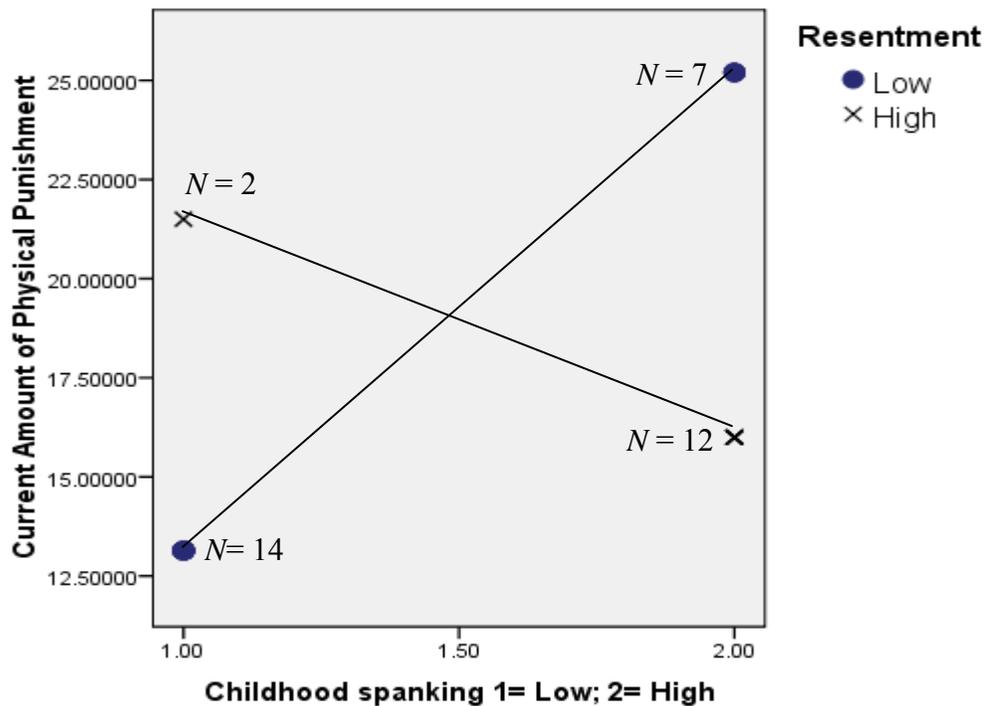
Given the relationship between feelings of resentment about being spanked and the amount of spanking received as a child, exploratory analyses investigated whether the interaction between these two variables was related to current physical punishment practices. First, an interaction term was calculated using reports of childhood physical punishment and feelings of resentment about being physically punished. Next, a three-step hierarchical regression was conducted to predict parent's (G2) current use of physical punishment. Parent's income and satisfaction with their child's behavior were entered at Step 1, parents' reports of being spanked and feelings of resentment were entered at Step 2, and the interaction between being spanked and feeling resented about being spanked was entered at Step 3.

In Step 1, parent's income and satisfaction with child's behavior accounted for 5.6% of the variance when predicting current physical punishment practices, $R^2 = .05$,

$F(2, 148) = 4.37, p < .05$. In Step 2, parents' (G2) reports of receiving physical punishment as a child and feelings of resentment accounted for 15.2% of the variance in predicting current physical punishment practices after controlling for income and satisfaction with child's behavior, $\Delta R^2 = .10, \Delta F(2, 146) = 8.32, p < .001$. In Step 3, the interaction between feelings of resentment and reported childhood spanking accounted for 22% of the variance in predicting current physical punishment practices, $\Delta R^2 = .07, \Delta F(1, 145) = 13.00, p < .001$.

The interaction between feelings of resentment about being physically punished and amount of childhood physical punishment as it relates to parents' (G2) current use of physical punishment is illustrated in Figure 3 (See Table 7 for hierarchical regression results). For easier readability, feelings of resentment about childhood physical punishment was divided into two categories (e.g., high resentment, +1 SD above the mean, $N = 59$ vs. low resentment, -1 SD below the mean, $N = 64$), and amount of childhood physical punishment received was divided into two categories (e.g., high amounts of childhood physical punishment, +1 SD above the mean, $N = 22$, vs. low amounts of childhood physical punishment, -1 SD below the mean, $N = 29$).

Figure 3. Interaction between resenting childhood physical punishment and amount of childhood physical punishment received predicting parents' current physical punishment practices.



As illustrated in Figure 3, the amount of physical punishment parents used with their child depended on their perceptions of receiving high amounts of physical punishment as a child *and* still resent having been physically punished. Parents who believed they were spanked frequently, but did not have feelings of resentment about being spanked more often fell into the high use of physical punishment with their child group (i.e., showed continuity across generations). Those who believed they were spanked frequently as a child, but however, had strong feelings of resentment about being

spanked were in the group who were low on physical punishment use (i.e., showed discontinuity across generations).

When parent-grandparent dyads were used, regressions indicated that grandparents' (G1) feelings of resentment about receiving physical punishment during their childhood were not significantly related to either reports of having used less physical punishment with their own child (G2), $\beta = -.16, p > .05$, or to their adult child's report of having received physical punishment during childhood (G2), $\beta = -.14, p > .05$. Moreover, the interaction between amount of childhood physical punishment reported by grandparents (G1) and their resentment about childhood physical punishment was not related to memories of physical punishment use with their own child (G2), $\beta = .32, p > .05$.

Summary. Overall, analyses pertaining to the transmission of physical punishment across generations were mixed. Predicting current parent's physical punishment use from reports of childhood physical punishment varies depending whose reports (grandparents or parents) were used. Furthermore, the extent to which physical punishment practices in one generation predict such practices in the next differ depending on how physical punishment use was measured (e.g., how much versus whether it was *too* much) and whether parents resented being physically punished.

Hypothesis #2: While childhood experiences are hypothesized to be related to parents (G2) current use of physical punishment, it is expected that physical punishment practices will change across generations. Today's parents are

hypothesized to be less likely than their own parents to use physical punishment with their own child.

Parents' (G2) and grandparents' (G2) reports of physical punishment use with their own children were not related, $r = .19, p > .05$. Given this lack of correlation, following up tests were conducted with HLM to determine the exact degree to which physical punishment practices were changing.

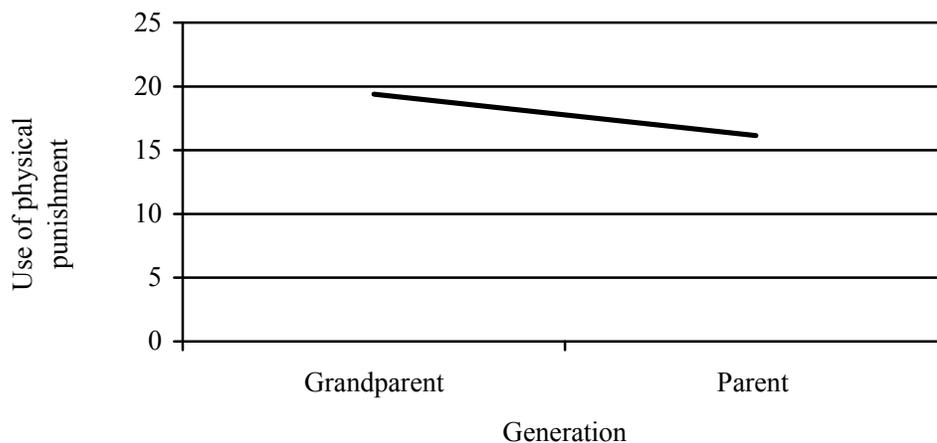
Before one can evaluate differences in discipline practices across generations, one must assess how much physical punishment use varies across both parents and grandparents. The unconditional means model is used to assess this variation. In the unconditional means model only one fixed effect (β_{00}) was estimated (Table 10, Model A). This represented the grand mean of physical punishment across all individuals and time points. Results indicated that the average level of physical punishment practices across all individuals (G1 and G2) was 17.64. This model highlighted a significant portion of variance within families, in other words, between parents and grandparents. Specifically, 87.72% of the variance in predicting physical punishment practices was attributed to within family differences. This meant that people were very different with respect to their reports of physical punishment use.

Given the large amount of within family variance, an unconditional change model was fitted for physical punishment practices. This model introduced Generation as a Level-1 predictor and thus describes variation in physical punishment practices across individuals over generational status (Table 10, Model B). The two fixed effects estimated by this model represented the intercept and slope of the average trajectory for the sample.

The slope effects at Level 2 were fixed since there was no between family predictors. Given that both the intercept and slope were statistically significant ($p < .001$), it is concluded that the average trajectory has an intercept of 16.19 and a slope of 2.80 when generation is considered. Thus, it is estimated that the average parent in the sample had an initial score of physical punishment at 16.19 and the addition of grandparent (Generation) increased physical punishment practices 2.80 points. Adding Generation to the model explained an additional 14.82% of the variance when predicting physical punishment practices.

The means for physical punishment as a function of generation are illustrated in Figure 4. The illustration highlights a general pattern suggesting that physical punishment practices are declining across generations; parents (G2) are using significantly less physical punishment than did their parents (G1).

Figure 4. Mean physical punishment use across generations.



Exploratory analyses with a subset of parents (N= 73) was to determine the extent to which parents believed they tried to behave differently from their parents. A second goal of these questions sought to identify parents' views about the ways in which they believe they are similar or different from their parents with respect to childrearing. The majority of parents felt that the way they parent their child resembles the way they themselves were parented in only a few ways (52.8%); the remainder felt they parent exactly like their parents (22.2%), or nothing like their parents (22.2%). Among parents who felt they parent their child differently, the majority felt their parenting practices differ from their parents (52.2%). For example, parents written comments included: "We don't hit or make fun of our child" (ID# - 74), "We remove or limit access things or privileges rather than strike out physically" (ID# - 90), "I was severely physically disciplined and I don't get that severe or even close" (ID # - 132), and finally "My mother was a hitter. She would slap, paddle, and hit. I have never ever done that. Nor would I" (ID # - 96).

Another group of parents (18.8%) indicated that they and their parents have different attitudes. Examples of parent comments include: "I seek to understand my child. I try to make my child's life enjoyable and exciting" (ID # 244), "I don't shame my child or impose emotional/psychological abuse" (ID # 254), or "I spend more time explaining why something is not allowed etc. and try to get advice from teachers and others" (ID # 76).

The rest of the parents (18.8%) referred to their own or their parents personal characteristics to describe the ways in which they and their parents differ. "My children

are the center of my existence and I show this” (ID # 253), “I am more patient” (ID # 239), or “I show frequent outward expression of physical/emotional love” (ID # 220).

Parents were also asked whether they actively try to use different parenting technique from those they experienced during childhood. Most parents (50.7%) endorsed the item indicating that they had decided to raise their child differently prior to their child’s birth or when their child was still young. A smaller percent of parents, 14.1%, decided to raise their child differently after seeking outside help (usually from a professional or family member). Finally, another 16.9% of the parents did things differently, but did not take any additional steps to bring about this change- it just came about.

Summary. These results support the hypothesis that parenting discipline practices are in fact changing. The exploratory data suggest that many parents made a conscious effort either before they had a child or with outsiders help to move away from using physical punishment. While parents are parenting differently in terms of discipline practices, parents seem to also be making changes in their philosophy of parenting such as being more patient, showing more affection, or actively trying to understand the needs of their child. Thus, change is happening, and occurring in other areas not limited to discipline practices.

Hypotheses # 3: Parents’ favorable attitudes about physical punishment will be related to physical punishment use.

Favorable attitudes towards spanking were positively linked to parents' (G2) physical punishment use with their children, $\beta = .53, p < .001$, even after controlling for parents' income and satisfaction with child's behavior. Moreover, parents' current attitudes towards spanking were positively linked to their perceptions of how often they were physically punished as a child, $\beta = .21, p = .01$, even after controlling their income and satisfaction with child's behavior. Finally, parents' current attitudes towards spanking were negatively associated with their feelings of resentment about being physically punished as a child, $\beta = -.20, p < .01$, even after controlling their income and satisfaction with child's behavior.

When grandparents' (G2) attitudes towards spanking were included in the analysis, regression results indicated that their attitudes towards spanking were positively associated with their memories of using physical punishment with their child (G2), $\beta = .53, p < .001$. Additionally, grandparents' attitudes were marginally associated to their children's (G2) memories of receiving physical punishment during childhood $\beta = .25, p < .10$. Thus, for all reporters, attitudes towards physical punishment corresponded with perceptions of either how often they were recipients of or used physical punishment.

Subsequent analyses using the parent-grandparent dyads indicated that grandparents (G1) attitudes towards spanking was positively associated with parents' (G2) attitudes towards spanking $\beta = .43, p = .001$. Follow-up independent sample t-tests confirmed that parents' and grandparents' attitudes towards spanking did not differ significantly, $t(272) = 1.17, p > .05$.

Given that parents' attitudes influenced their spanking behaviors, and grandparents' attitudes influenced parents' attitudes, exploratory analyses investigated whether attitudes towards spanking over two generations predicted parents' current physical punishment use. The first step tested whether grandparents' (G1) attitudes towards spanking influenced parents (G2) use of physical punishment. Results indicated that grandparents' attitudes towards spanking were marginally related to their adult children's (G2) use of physical punishment $\beta = .25, p = .06$. However, when grandparents' (G1) attitudes towards spanking and parents' (G2) attitudes towards spanking were entered into the same regression equation, results indicated that only parents' (G2) attitudes towards spanking predicted parents' current physical punishment use, $\beta = .55, p < .001$. The influence of grandparents' attitudes on parents' (G2) physical punishment was reduced to non-significant, $\beta = .01, p > .05$.

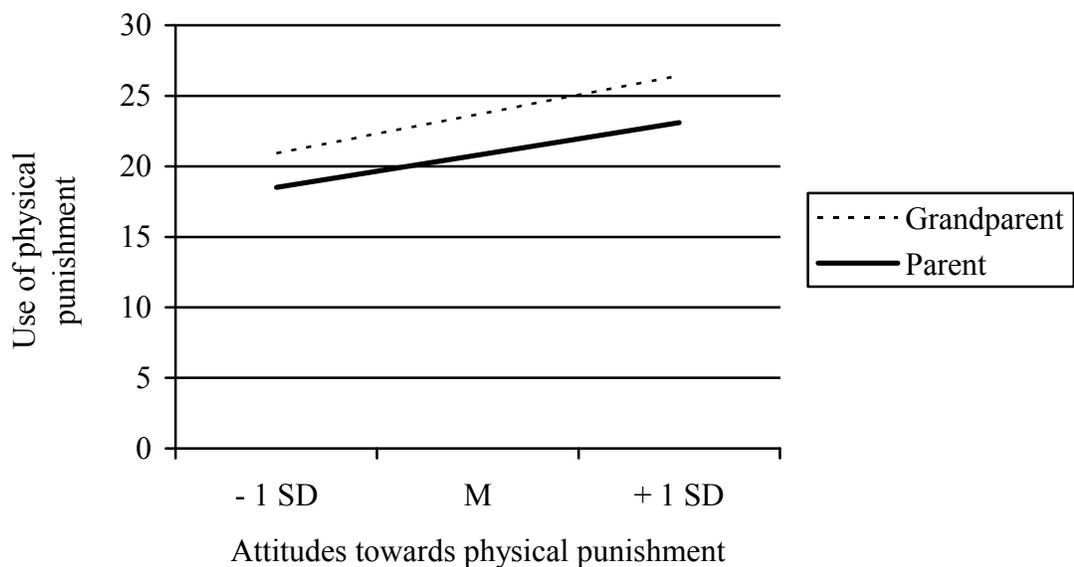
The hypothesis was also tested using HLM. This model introduced Attitudes as another Level-1 predictor and thus describes variation in physical punishment practices across individuals as a function of their attitudes towards physical punishment, independent of generational status (Table 10, Model C). Given that both intercepts and the slope were statistically significant ($p < .001$), it is concluded that the average trajectory has an intercept of 16.32 and a slope of 2.51 when generation was considered and a slope of .17 when attitudes towards physical punishment were considered. Thus, it is estimated that the average parent in the sample had an initial score of physical punishment at 16.19, and the addition of grandparent (Generation) increased physical punishment practices 2.51 points. Furthermore, for every one point increment in

favorable attitudes towards spanking, physical punishment use increased .17 points.

Adding Attitudes to the model explained an additional 12.80% of the variance in physical punishment use for all parents (G1 and G2).

The means for physical punishment as a function of generation and attitudes towards physical punishment are illustrated in Figure 5. This illustration highlights that while today's parents use less physical punishment than did their parents, it is more likely that a parent will use physical punishment if they hold a favorable attitude about using it.

Figure 5. Scores on use of physical punishment as a function of generational status and attitudes towards physical punishment.



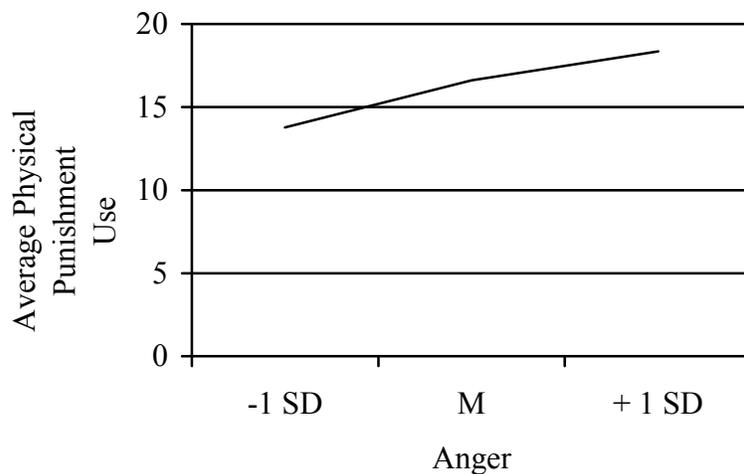
Summary. Results support the hypothesis that a parent's attitude towards spanking is associated with the use of physical punishment. Furthermore, grandparents' and parents' attitudes towards spanking were positively correlated, indicating continuity over

generations in attitudes about spanking. However, what were important in examining predictors of current physical punishment use were parents' attitudes towards spanking.

Hypothesis # 4: Parents' level of anger and their ability to regulate anger will be related to physical punishment use.

Anger. Parents' (G2) degree of everyday anger was positively associated with their current reports of physical punishment use, $\beta = .16, p = .05$, even after controlling for household income and satisfaction of children's behavior. Figure 6 illustrates these results by comparing parents high (+ 1 SD above the mean, $N = 24$) versus low (-1 SD below the mean, $N = 27$) on current physical punishment use with respect to their degree of everyday anger.

Figure 6. Parent's (G2) physical punishment use as it relates to feelings of anger



Exploratory t-test compared the level of anger for parents who were spanked frequently (+ 1 SD above the mean, $N = 22$) with that of parents who were spanked rarely (- 1 SD below the mean, $N = 28$). Results indicated that childhood histories of receiving physical punishment were not related to parents' level of anger, $t(48) = 1.21, p > .05$.

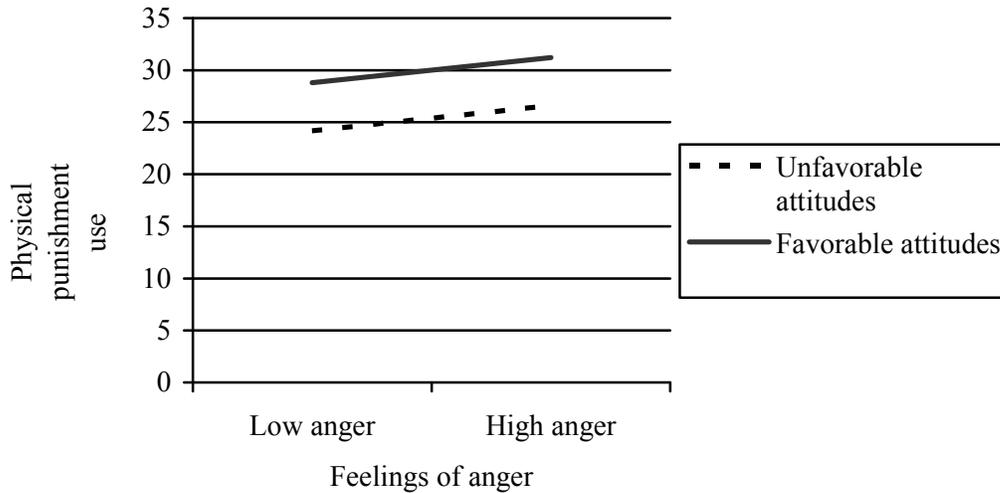
For the parent-grandparent dyads, grandparents' (G1) degree of everyday anger was positively related to their reports of past physical punishment use with their child, the adult parent (G2), $\beta = .26, p < .05$, but not to their children's (G2) memories of having received physical punishment, $\beta = -.15, p > .05$. Subsequent analyses indicated that grandparents' (G1) degree of everyday anger was not related to their adult child's (G2) reports of feeling angry, $\beta = .14, p > .05$. Follow-up t-tests comparing parents' and grandparents' levels of anger indicated that grandparents (G1) actually reported lower levels of anger ($M = 87.03, SD = 14.40$) than did the parents (G2) ($M = 97.13, SD = 18.81$), $t(261) = 3.94, p < .001$.

The hypothesis was also tested using HLM to see the extent to which feelings of anger contributed to physical punishment use for all parents (G1 and G2). Thus, this model introduced Anger as another Level-1 predictor and thus described variation in physical punishment practices across individuals independent of generational status and attitudes towards physical punishment (Table 10, Model D). Given that the intercept and the slopes were statistically significant ($p < .001$), it is concluded that the average parent had an intercept of 16.32 on physical punishment use and a slope of 2.51 when generation was considered, a slope of .17 when attitudes towards physical punishment were considered, and a slope of .07 when feelings of anger were considered. The addition

of Anger to the model explained an additional 18.06% of variance in physical punishment use.

The means for physical punishment use for parents (G2) as a function of attitudes towards physical punishment and feelings of anger are illustrated in Figure 7. While grandparents (G1) scores are not illustrated, they follow a similar pattern to parents' scores, only they have a higher beginning intercept. The illustration highlights how both attitudes towards physical punishment and feelings of anger contribute to physical punishment use. For example, a parent who had an unfavorable attitude towards physical punishment, but frequently gets angry may be more likely to use physical punishment compared to a parent who also has unfavorable attitudes towards physical punishment, but who less frequently got angry. Anger may be influencing behavior above and beyond a person's attitudes towards the event/object.

Figure 7. Parents' (G2) scores on use of physical punishment as a function of attitudes towards physical punishment and feelings of anger.



Difficulty Regulating Anger. After controlling for parents' household income and satisfaction with children's behavior, parents' (G2) difficulty regulating their feelings of anger were not associated whether their use of physical punishment, $\beta = .08, p > .05$. Given the lack of association with the Difficulty Regulating Anger total score, follow-up analyses investigated whether each of the five subscales were related to physical punishment use. Results indicated that each of the five subscales, (e.g., lack of emotional awareness, nonacceptance of emotional responses, difficulty engaging in goal-directed behavior during experience of negative emotion, difficulty controlling behavioral impulses during experiences of negative emotion, and limited access to emotional regulation strategies) were not associated with parents physically punishing their children.

Exploratory factor analysis investigated whether different subscales emerged than the ones originally proposed by the author. Given the correlation among items within the Difficulty Regulating Emotion scale, the rotation method used was Oblimin rotation (Harman, 1976). It has been argued to retain factors with eigenvalues greater than one (Weiss, 1976). Using this criterion as well as by examining the scree plot, it appeared that five factors emerged. For this report, only variables with a loading greater than .60 on a factor was considered "significant" and used in defining that factor.

Factor analysis results indicated that the seven items which loaded onto Factor 1 were exactly those which made up the already established “nonacceptance of emotional responses” subscale which was not associated with physical punishment use. Factor 2 consisted of four items which are typically reversed scored when calculating total difficulties regulating anger (e.g., the items indicated more effective emotion regulation). These items did not make up an already established subscale and thus were summed to make their own subscale. After controlling for parents’ household income and satisfaction with children’s behavior, parents’ (G2) more effective anger regulation techniques were not associated with their use of physical punishment, $\beta = -.12, p > .05$. Factor 3 consisted of five items. These items all consisted of those already on the “difficulty engaging in goal-directed behavior” subscale, which was not associated with physical punishment use. Factor 4 consisted of four items and each of these items were already on the “impulse control difficulty” subscale. Similarly, this subscale was not associated with parent’s use of physical punishment. Finally, Factor 5 consisted of six

items and these items made up in entirety the “limited access to emotion regulation strategies” subscale, which was not related to physical punishment use.

Additional analyses investigated whether receiving physical punishment as a child impaired a person’s ability to regulate their anger. Parents were divided into three groups. Parents who received high amounts of physical punishment as a child (+ 1 SD above the mean, $N = 21$) were compared to parents who received low amounts of physical punishment as a child (- 1 SD below the mean, $N = 26$) with respect to their anger regulation abilities. The middle group of parents was not included. T-tests indicated that parents who were spanked frequently ($M = 59.95$, $SD = 15.05$) had no more difficulty regulating their anger than those who were not spanked frequently ($M = 54.50$, $SD = 9.95$), $t(46) = 1.42$, $p > .05$.

Using parent-grandparent dyads, grandparents’ (G1) difficulty regulating anger was neither related to their reports of past physical punishment use with their child (G2), $\beta = .07$, $p > .05$, nor to parents’ (G2) memories of receiving physical punishment as a child, $\beta = -.21$, $p > .05$. Subsequent analyses indicated that grandparents’ (G1) difficulty regulating everyday anger was not related to how their adult child (G2) regulates their own anger, though this did approach significance, $\beta = .25$, $p = .07$. Follow-up t-tests compared parents’ and grandparents’ abilities to regulate anger. Results indicated that parents (G2) actually reported more difficulties regulating their anger ($M = 60.30$, $SD = 12.37$) compared to their parents (G1) ($M = 53.21$, $SD = 9.96$), $t(65) = 2.60$, $p < .05$.

The hypothesis was also tested using HLM to identify exactly how much anger regulation contributes to physical punishment use for all parents (G1 and G2). Thus, this

model introduced Anger Regulation as another Level-1 predictor and thus described variation in physical punishment practices across individuals independently of generational status, attitudes towards physical punishment, and feelings of anger (Table 10, Model E). Given that the intercept and some of the slopes were statistically significant ($p < .001$), it is concluded that the average parent had an intercept of 16.07 on physical punishment use and a slope of 3.17 when generation was considered, a slope of .17 when attitudes towards physical punishment were considered, and a slope of .07 when feelings of anger were considered. The slope of emotion regulation was not significant, and only explained an additional 4.8% of variance when predicting physical punishment use across all parents (G1 and G2).

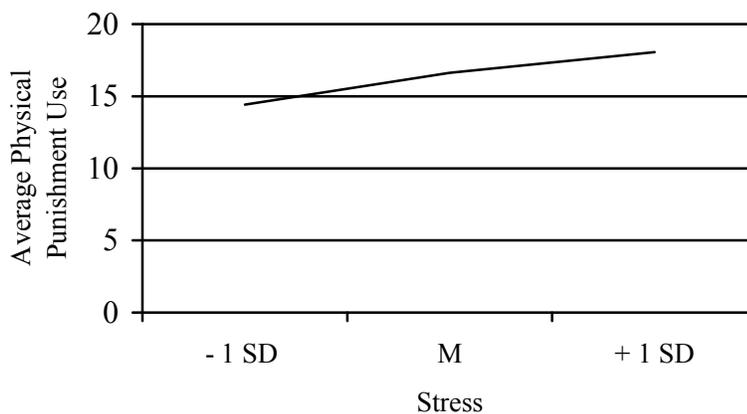
Summary. Results supported the hypothesis that a person's feelings of anger were related to their reports of using physical punishment with their child, despite generational status. Interestingly, regression results indicated that parents' difficulties regulating anger were not associated with increases in their reports of physical punishment use with their child. The HLM results indicate that a parent's current emotion regulation abilities did not add significant information when predicting physical punishment practices across all parents (G1 and G2).

Hypothesis #5: Parents' level of stress and ability to cope with stress will be related to physical punishment use.

Stress. After controlling for parents' income and satisfaction with their children's behavior, parents' (G2) degree of everyday stress was positively associated with their use

of physical punishment with their child, $\beta = .21, p < .01$. These results are illustrated in Figure 8. Follow-up t-tests compared parents high (+ 1 SD above the mean, $N = 22$) versus low (-1 SD below the mean, $N = 25$) on current physical punishment use with respect to feelings of stress. Results indicated that parents who reported high amounts of physical punishment use with their own child also reported high levels of stress ($M = 40.54, SD = 5.61$) as compared to parents that report using low amounts of physical punishment with their child ($M = 36.56, SD = 5.54$), $t(45) = -2.44, p < .05$.

Figure 8. Parent's (G2) physical punishment use as it relates to feelings of stress



Using data for grandparent-parent dyads, grandparents' (G1) reports of everyday stress were related neither to their reports of past physical punishment use with their child (G2), $\beta = .03, p > .05$, nor to their adult children's memories of being physically punished, $\beta = .10, p > .05$. Subsequent correlation analyses indicate that grandparents' (G1) reports of everyday stress and their children's (G2) reports of everyday stress are different, $r = -.17, p > .05$. To determine which group of parents feels more stressed,

follow-up t-tests were conducted. T-tests results indicated that parents (G2) reported more stress ($M = 38.19$, $SD = 4.68$) than did their parents (G1) ($M = 35.41$, $SD = 4.05$), $t(247) = 3.21$, $p < .01$.

This hypothesis was also tested using HLM to explain physical punishment practices across all parents (G1 and G2). This model introduced Stress as another Level-1 predictor and thus describes variation in physical punishment practices across individuals independent of generational status, attitudes towards physical punishment, feelings of anger, or person's ability to regulate their anger (Table 10, Model F). Given that the intercept and some of the slopes were statistically significant ($p < .001$), it was concluded that the average parent had an intercept of 16.01 on physical punishment use and a slope of 3.27 when generation was considered, a slope of .17 when attitudes towards physical punishment were considered. The slope of anger, emotion regulation, and stress were not significant, and the addition of stress only explained an additional .5% of variance when predicting physical punishment use across all parents (G1 and G2).

Coping with stress. After controlling for income and satisfaction with their children's behavior, parents' capacity to cope with stressors was not associated with a reduction in the likelihood that they would use physical punishment, $\beta = -.06$, $p > .05$. To help explain this unexpected finding, I explored whether receiving physical punishment as a child impaired parents' ability to cope with stress. Parents were placed into two groups, those who experienced high amounts of physical punishment as a child (+1 SD above the mean, $N = 22$) and those who did not (- 1 SD below the mean, $N = 24$). The middle group of parents was not used. T-tests indicated that parents who received high

amounts of physical punishment as a child ($M = 109.62$, $SD = 14.55$) did not differ on their reported stress coping abilities compared to those who received low amounts of physical punishment ($M = 114.97$, $SD = 12.83$), $t(44) = 1.32$, $p > .05$.

When grandparents' (G1) ability to cope with stress was included in the analysis, such reports were not related either to their reports of having used physical punishment with their child, the adult parent (G2), $\beta = .04$, $p > .05$, or to their adult child's memories of how often they were physically punished, $\beta = .01$, $p > .05$. Subsequent correlation analyses indicated that grandparents' (G1) ability to cope with stress and their adult children's (G2) ability to cope with stress are different, $r = .09$, $p > .05$. To determine which group of parents has more effective stress coping strategies, follow-up t-tests were conducted. T-test results indicate, however, that parents' (G2) and grandparents' (G1) reports of coping with stress are not significantly different, $t(106) = 1.37$, $p > .05$.

The hypothesis was also tested HLM to explain how Stress Coping predicts physical punishment practices across all parents (G1 and G2). This model introduced Stress Coping as another Level-1 predictor and thus describes variation in physical punishment practices across individuals independent of the previously entered variables (e.g., generational status, attitudes towards physical punishment, feelings of anger, a person's ability to regulate anger and their level of stress) (Table 10, Model G). Given that the intercept and some of the slopes were statistically significant ($p < .001$), it is concluded that: the average parent has an intercept of 15.97 on physical punishment use and a slope of 3.39 when generation is considered, and a slope of .17 when attitudes towards physical punishment are considered. The slope of anger, emotion regulation,

stress, and stress coping skills were not significant, and the addition of stress coping skills explained no additional variance in physical punishment use across all parents (G1 and G2).

Summary. Results provide partial support for the hypothesis. Specifically, parents', but not grandparents', reports of stress relate to their reports of using physical punishment with their own child. Interestingly, how one currently copes with stress does not influence current physical punishment use, or past physical punishment use. The HLM results where all parents were considered simultaneously (G1 and G2) indicated that parents' current level of stress and ability to cope with stress were not related to physical punishment practices.

Hypothesis #6. While childhood experiences are hypothesized to be related to parents' current discipline strategies, attitudes about physical punishment, levels of anger and stress, and strategies for handling anger and stress each influence the transmission of physical punishment above the influence of childhood experiences.

Current attitudes and childhood experiences. A three-step hierarchical regression was used to predict parent's (G2) current use of physical punishment. Parent's income and satisfaction with their child's behavior were entered at Step 1, parents' memories of being spanked was entered at Step 2, and parents' attitudes towards spanking was entered at Step 3.

In Step 1, parents' income and satisfaction with their children's behavior accounted for 5.3% of the variance in current physical punishment practices, $R^2 = .05$,

$F(2, 154) = 4.31, p < .05$. In Step 2, parents' (G2) memories of receiving physical punishment as a child accounted for 6.7% of the variance in current physical punishment practices after controlling for income, $\Delta R^2 = .07, \Delta F(1, 153) = 11.64, p = .001$. In Step 3, parents' (G2) attitudes towards spanking accounted for 21.6% of the variance in current physical punishment practices after accounting for household income, satisfaction with child's behavior, and experiences of physical punishment as a child, $\Delta R^2 = .22, \Delta F(1, 152) = 49.38, p < .001$.

Hierarchical regression results indicated that parents' childhood experiences of receiving physical punishment were marginally related to their use of physical punishment with their own child, while attitudes towards spanking strongly predicted physical punishment use above the influences of income and receiving physical punishment as a child. (See Table 7 for hierarchical regression results.)

Feelings of anger, ability to regulate anger, and childhood experiences. A four-step hierarchical regression was used to identify predictors of parents' (G2) current physical punishment practices. Parent's income and satisfaction with their children's behavior were entered in Step 1, parents' memories of being spanked were entered in Step 2, parents' feelings of anger were entered in Step 3, and parents' ability to regulate anger were entered at Step 4.

In Step 1, parent's income and satisfaction with their child's behavior accounted for 5% of the variance in predicting current physical punishment practices, $R^2 = .05, F(2, 152) = 3.97, p < .05$. In Step 2, parents' (G2) memories of receiving physical punishment as a child accounted for 6.9% of the variance in predicting current physical punishment

practices after controlling for income and satisfaction with the child's behavior, $\Delta R^2 = .07$, $\Delta F(1, 151) = 11.78$, $p < .001$. In Step 3, parents' (G2) level of anger accounted for 2.1% of the variance in predicting current physical punishment practices after accounting for household income and having received physical punishment as a child, $\Delta R^2 = .02$, $\Delta F(1, 150) = 3.74$, $p < .001$. In Step 4, parents' (G2) ability to regulate anger did not account for any significant variance beyond the previously entered variables, $\Delta R^2 = .002$, $\Delta F(1, 149) = .30$, $p = .59$.

Hierarchical regression results indicated that when parents' childhood experiences, level of anger, and anger regulation were considered together, only parents' childhood experiences significantly predicted using physical punishment; feelings of anger were marginally related to physical punishment practices. Contrary to predictions, anger regulation was unrelated to physical punishment use (See Table 8 for hierarchical regression results).

Feelings of stress, coping with stress, and childhood experiences. A four-step hierarchical regression was used to identify predictors of parents' (G2) current physical punishment practices. Parents' income and satisfaction with their children's behavior were entered in Step 1, parents' memories of being spanked was entered in Step 2, parents' feelings of stress was entered in Step 3, and parents' ability to cope with stress was entered at Step 4.

In Step 1, parent's income and satisfaction with child's behavior accounted for 5.5% of the variance in physical punishment practices, $R^2 = .06$, $F(2, 152) = 4.42$, $p < .05$. In Step 2, parents' (G2) memories of receiving physical punishment as a child accounted

for 6.8% of the variance in physical punishment practices after controlling for income and satisfaction with child's behavior, $\Delta R^2 = .07$, $\Delta F(1, 151) = 11.69$, $p = .001$. In Step 3, parents' (G2) level of stress accounted for 3.3% of the variance in physical punishment practices after accounting for household income, satisfaction with the child's behavior, and receiving physical punishment as a child, $\Delta R^2 = .03$, $\Delta F(1, 150) = 5.80$, $p < .05$. In Step 4, parents' (G2) ability to cope with stress did not account for any additional variance beyond the previously entered variables, $\Delta R^2 = .004$, $\Delta F(1, 149) = .78$, $p = .38$.

Hierarchical regression results indicated that when parents' childhood experiences, level of stress, and coping with stress were considered together, both childhood experiences and feelings of stress predicted physical punishment use. A parent's ability to cope with stress was not related to reports of physical punishing their child when all other variables were considered. (See Table 9 for hierarchical regression results).

Summary. Results provide partial support for the hypothesis. Whereas receiving physical punishment as a child contributed to parents' use of similar practices with their own child, several other variables were also important to consider. Specifically, parents' attitudes towards spanking, level of anger and level of stress were associated with physical punishment use even after considering childhood experiences. Coping with stress and regulating anger were not independently associated with parents' use of physical punishment.

CHAPTER FIVE

Discussion

This study investigated risk and protective factors that either promote or deter the transmission of physical punishment practices across generations. Risk factors of interest included having favorable attitudes towards physical punishment and high levels of anger and stress. To predict the likelihood that parents will physically punish their children, researchers have highlighted the importance of identifying whether a person was physically punished during childhood (Deater-Deckard et al., 2003; Holden et al., 1992; Rodriguez et al., 1999), has favorable attitudes towards physical punishment (Holden et al., 1995; Holden & Zambarano, 1992; Jackson et al., 1999), and experiences high levels of anger (Jackson et al., 1999; Peterson, et al., 1994) and stress (Garvey et al., 2000; Pinderhughes et al., 2000; Rodriguez & Green, 1997). This study extends prior research by also identifying protective factors that reduce the likelihood that physical discipline practices will be carried forward, such as a parent's ability to regulate anger or cope with stress. To this author's knowledge, this is one of the first studies to examine these potential protective factors. This study is also unique in that I used information from two generations of parents to assess whether the parents in this study experienced physical punishment during childhood and to identify similarities and differences across the generations in their attitudes towards physical punishment, level of anger and stress, and the capacity to regulate anger and cope with stress.

Physical punishment practices across generations

As expected, parents' reports of experiencing physical punishment as a child were associated with their current use of similar practices with their own children. This finding is consistent with other findings that indicate similarities between parents' and grandparents' reports of using physical punishment with their child (Covell, Grusec, & King, 1995). For this report, cross generational similarities in physical punishment practices existed even after controlling for income, known to be linked to physical punishment use (Daro, 1988; Wissow, 2001), and satisfaction with the child's behavior, another contributor to physical punishment use (Rubin, Stewart, & Chen, 1995; Simons et al., 1993).

Past researchers have highlighted how discipline experiences during childhood are related to the discipline practices parents employ. Furstenberg (1971) as well as Cashmore and Goodnow (1985) suggest that children internalize the discipline practices they experienced during childhood which they then repeat with their own children. This continuity across generations is thought to occur in two steps: 1) the child accurately perceives the parent's message (i.e., perception that spanking is a discipline method used by parents), and 2) the child accepts the perceived message (i.e., spanking gets children to stop doing the undesired behavior).

Grusec and Goodnow (1994) extended this line of thinking by highlighting variables which may influence children's acceptance of their parents' discipline strategies. Children are more likely to accept and subsequently internalize their parents' discipline practices if they believe that the discipline used was well-intentioned and due-process was served. In other words, "you misbehaved and these are the consequences".

In this view, the child would feel there was a “good” reason to be spanked – they had to “learn their lesson”. Likewise, for this study, parents reported continuing to use physical punishment practices with their own child because they felt the physical punishment they received was effective in teaching them something of importance about their misbehaviors. Thus accepting or believing one’s childhood physical punishment experiences were important is a risk factor promoting continuity in physical punishment practices from one generation to the next. Understanding parents’ beliefs about the benefits of having been physically punished as a child, not just whether they experienced such practices, may provide insight into continuity and change in physical punishment across generations.

This report relied on parents’ retrospective recollections of being physically punished as a child, as well as grandparents’ retrospective recollections about being physically punished as a child and their recollections about using physical punishment on their own children. Because direct evidence of parents past and current use of physical punishment is rarely available, most studies examining the intergenerational transmission of physical punishment rely on retrospective reports (Durrant, Broberg, & Rose-Krasnor, 1999; Holden & Zambarano, 1992; Gaginé, Tourigny, Joly, & Pouliot-Lapointe, 2007; Murphy-Cowan & Stringer, 1999; Rodriguez & Sutherland, 1999). However, though there are some exceptions that include grandparents’ reports as well (Covell, Grusec, & King, 1995). Despite being a common methodological technique in assessing continuity and change across generations, some researchers have called into question the validity of using retrospective reports.

Using longitudinal designs, there is mixed evidence regarding whether adults can accurately remember past discipline strategies. Some studies suggest retrospective reports are no greater than what might be expected by chance (Offer, Kaiz, Howard, & Bennett, 2000). Additionally, studies highlight that parents show low stability in their reports on their own parenting with correlations between contemporary parental reports and parental recall 25 years later as low as $r = -.02$ (Cournoyer & Rohner, 1996). Despite this evidence against retrospective reports, data from an impressive longitudinal study provided validity for adults' retrospective memories of their own childrearing practices (Prescott, Bank, Reid, Knutson, Burraston, & Eddy, 2000). Specifically, observations of parent's discipline practices were obtained when their child was as young (the youngest child was 3 years-old). Ten years later when the child was in adolescence, the same parents were asked to recall their discipline practices they used when their child was young. Prescott and colleagues (2000) found that the early observations of parents' physical discipline techniques were significantly correlated with parents' retrospective memories collected 10 years later. Thus, it is still unclear whether parents' retrospective reports of physical punishment use on their children are reliable and valid.

To help overcome this limitation about the validity of parents' retrospective reports, this study collected information about childhood physical punishment experiences from two separate reporters, the parent and the adult child. This presented an interesting challenge since it may be unclear who was the more accurate reporter of what was actually done? For this report, only parents' memories of receiving physical punishment, and not their parents' (G1) memories of giving physical punishment, were

significant when examining the transmission of discipline practices across generations. Moreover, parents' (G2) reports about the amount of physical punishment they received during childhood were not associated with the reports that their parents (G1) gave. Though this report could not assess which reporter was more accurate to what really happened, nor which reporter perceived greater amounts of physical punishment, the lack of association between parents' and grandparents' reports may indicate that memories about childhood physical punishment practices or experiences may be distorted.

The lack of correlation between parents' (G2) reports of receiving physical punishment and their parents' (G1) reports of administering it may be an indicator that memories distort over time. While it is not known who is the better reporter of what happened, perhaps the report more strongly associated with current parenting practices comes from the reporter who actually *experienced* the physical punishment, compared to those who did not experience the physical punishment (e.g., grandparents who *administered* the physical punishment). Given the mixed evidence of parents' retrospective memories of physical punishment use (Cournoyer & Rohner, 1996; Prescott, Bank, Reid, Knutson, Burraston, & Eddy, 2000), perhaps parents are unable to accurately remember what actually happened since they did not actually experience the discipline. When asked about childhood experiences of physical punishment, adults' retrospective reports and the ones they gave during childhood were similar (White & Widom, 2007). Prospective studies of adolescents' childhood memories of receiving physical punishment indicate that their reports do not change when asked again 10 years later as an adult (Knutson & Selner, 1994).

The aforementioned studies provide evidence that the reporter who actually experienced the physical punishment is a valid informant. Though it is unknown if they are more accurate than their parents (G1) who must recall what punishments they did. In terms of predicting what parents (G2) are currently doing, perhaps *parents' (G2)* memories of what happened are what are important, whether they are accurate or not. This may be one reason why in this report only parents' (G2) reports of receiving physical punishment were related to their current reports of physical punishment practices, not grandparents' reports of giving physical punishment. It is still unclear if parents (G2) are the best reporters what happened. Though multiple informants may be helpful at reducing errors from retrospective reports, additional questions arise when informants do not agree on what happened. Longitudinal investigations that include observational data should examine at what point do memories of what really happened distort, and if other characteristics of the parent-child relationship help preserve or distort memories.

This study also investigated factors from childhood which may deter the transmission of physical punishment practices across generations. From a social psychological perspective, affect may influence one's attitude towards physical punishment which would either promote or lessen the likelihood that a parent will use physical punishment with their own child. Having perceptions that one received too much physical punishment as a child or feeling resentment about receiving physical punishment as a child may activate emotions which influence one's position about the effectiveness of physical punishment. Such factors were hypothesized in this study to deter parents

from using physical punishment or repeating childhood practices because of the emotions evoked may cause parents to have less favorable attitudes about physical punishment.

After controlling for income and parent's satisfaction with their child's behavior, parents who felt they received *too* much physical punishment used less amounts of physical punishment with their own child. In a review of the literature that included the frequency of physical punishment practices Whipple and Richey (1997) indicate that nonabusive parents spank their child on average 2.5 times within a 24-hour period. While it is unknown how many times the parents in this report were spanked within a 24-hour period, it seems parents' (G2) perceptions of being spanked too much do negatively influence its use with their own children.

Interestingly, feelings of resentment about childhood physical punishment alone were not associated with a decline across generations in parents' use of physical punishment. Rather, the interaction between parents' feelings of resentment about having been physically punished and the frequency with which they were physically punished was associated with their current use of physical punishment with their own children. Parents who were spanked frequently, but also had high feelings of resentment about being spanked were those most likely to not repeat the high amounts of physical discipline they experienced as a child. It was not surprising that feelings of resentment may arise from being physically punished, either at that moment as a child or later during adulthood. 86% of parents say that their children showed resentment after being physically punished (Graziano, Hamblen, & Plante, 1996), and the reasons parents give for breaking the intergenerational cycle of physical punishment with their own child

include remembering having felt embarrassed and hatred about being spanked (Mishkin, 1987).

Conversely, those who were spanked frequently, but did not resent being spanked, were those most likely to continue the use of physical punishment with their own child as evidenced by their higher reports of current physical punishment use. This latter group represents those who are at most risk of continuing maladaptive techniques, such as physical punishment. Perhaps this group of parents came to recognize the physical punishment they received as normal and the use of physical punishment as a typical discipline technique. Studies show that parents who received high amounts of physical punishment as a child, but who do not perceive their childhoods to have been abusive, were most likely to endorse and use physical punishment techniques with their own children, compared to parents who were physically punished frequently, but labeled themselves as abused or parents who were not frequently physically punished (Bower-Russa, Knutson, & Winebarger, 2001).

The set of parents who were rarely spanked as a child were also divided into two categories, those who have high amounts of resentment, and those who have low amounts of resentment. Unexpectedly, parents who were rarely spanked as a child, but have high amounts of resentment about those few instances, used higher amounts of physical punishment with their own children than those who have low amounts of resentment. Egeland, Jacobvitz, & Strofe (1988) distinguished among mothers who were successful in breaking the intergenerational transmission of abuse with those who were not. Mothers who were successful at breaking the cycle were those who underwent therapy and gained

perspective on their relationship with their own abusive parent and forgave their parent. While this study did not deal with abuse per se, perhaps the parents who had high amounts of resentment about the few instances they were physically punished experienced overly harsh punishment. Thus, even though these instances were rare, their harboring feelings of resentment may be an indicator that they have not come to terms with their past childhood and forgiven their parent. Though it is unknown if they were seeking counseling, not coming to terms with or forgiving parents may be a risk factor in promoting continuity of physical punishment across generations.

However, for this report, it is not clear whether these few instances of physical punishment were overly harsh or even abusive. Thus an alternative explanation is that perhaps even though these parents were rarely spanked, their high feelings of resentment are hindering their abilities to parent in a more sensitive manner and thus they are not able to use alternative, non-physical discipline techniques. This high level of resentment may represent a risk factor for some parents, increasing the likelihood that they will use physical punishment, even though it was not a common technique used with them during childhood. Parents with high feelings of resentment about instances that rarely happened may be people who get more upset in general or have a harder time letting things in the past go and calming down. Consequently, they may be more likely to use physical punishment, even though they resented being physically punished as a child.

Finally, this group only contained a few parents, making it hard to compare this small group to other groups and harder to generalize the results to a larger population. These few parents may have been the exception rather than the norm and thus further

research is needed with a larger sample to determine in what ways feelings of resentment about childhood physical punishment actually deter parents from using physical punishment.

Relationship between attitudes and practice.

As expected, parents' favorable attitudes towards physical punishment were associated strongly with current use of such discipline practices, even after controlling for income and satisfaction with their child's behavior. This finding is consistent with past reports (Holden et al., 1995; Holden & Zambarano, 1992; Jackson et al., 1999) and highlights the notion that favorable attitudes towards physical punishment is a risk factor increasing the likelihood that physical punishment practices will continue across generations. Given that specific attitudes strongly correspond with particular behaviors, an important question to address is where do attitudes towards physical punishment originate?

Results from this report indicated that parents' favorable attitudes towards physical punishment may have originated from one or a combination of the following factors: 1) socialization from their parents (G1) since the parents and grandparents' attitudes are similar; 2) society values (e.g., "spare the rod or spoil the child") which would contribute to similarities between grandparents and parents' attitudes toward punishment; and/or 3) an endorsement of the way they were raised which involved being punished physically.

Similarities in attitudes between parents and youth may be an indicator that attitudes are acquired in the family; however, factors outside the family, such as society

could also be influencing attitude-socialization within the family. Past studies that explore how family members socialize and influence subsequent generations indicate that the best predictor of children's own position is their *perception* of how their parents felt about the same situation or topic (i.e., physical punishment), not necessarily the parents' real position (Cashmore & Goodnow, 1985). Thus, with respect to physical punishment, it may be that attitudes are acquired directly from the family of origin, and thus influence physical punishment use. But what might be even more important in predicting physical punishment use is the way the adult child (G2) interprets their parents' (G1) position or attitudes about spanking. As evidenced within this report, harboring resentment about being punished physically during childhood was associated with parents' less favorable attitudes about using physical punishment. Thus, resenting ones' parenting practices may shield a person from becoming socialized to agree with their parents attitudes about physical punishment and thereby, reduce the likelihood that they will carry forward their parents' discipline practices.

Further studies are needed to more fully understand the origins of adults' favorable attitudes toward physical punishment and what may cause a parent to reject becoming socialized to use particular punishment techniques. This study is retrospective. Only prospective longitudinal studies can fully disentangle the contribution of past and current societal values, early family experiences, and grandparents' values and belief systems on parents' attitudes toward physical punishment. Understanding the origin of a parent's attitude may provide information about its salience which would then forecast the likelihood that such attitudes might change.

Negative emotion and stress.

Behavior can be explained as a response to ones' emotions as well as a person's attitudes. Hence the present study also examined whether parents' level of anger and stress are helpful at further understand why some parents repeat the discipline practices they experienced while others do not. Studies using parents' reports of their own behavior indicate that negative emotions and stress significantly predict parents (G2) use of physical punishment (Ateah & Durrant, 2005; Garvey et al., 2000; Jackson et al., 1999; Peterson, et al., 1994; Pinderhughes et al., 2000; Rodriguez & Green, 1997). Similar results were obtained using hypothetical vignettes -- parents endorsed more negative parental responses to a hypothetical child's misbehavior when the parent was in an angry state (Dix, Reinhold, & Zambarano, 1990). This study found similar results as in previous studies, providing further evidence that feelings of anger and stress are associated with physical punishment use.

Interestingly, the present study demonstrated that grandparents' (G1) ongoing feelings of anger, but not stress, were related significantly to physical punishment practices with their own child approximately 30 years ago. Most studies highlight that anger actually declines with age (Phillips, Henry, Hosie, & Milne, 2006; Schieman, 1999). Given this, it seems likely that grandparents' would score lower on reports of anger compared to parents, which they did. Given the strong links between feelings of anger and physical punishment use (Ateah & Durrant, 2005; Jackson et al., 1999; Rodriguez & Green, 1997), low or infrequent feelings of anger should be related to low physical punishment use. Contrary to expectations, grandparents' (G1) lower scores on

feelings of anger, compared to parents (G2), were significantly associated with their past physical punishment use, which was higher than what today's parents (G2) reported.

One explanation for this unusual finding is perhaps anger is so strongly linked to parents' use of physical punishment, that even low amounts of anger are related to an increase in physical punishment use. Though the information is not available, it may be that grandparents scored higher on anger years ago when they were parenting a young child – in this case, the links between anger and physical punishment use would be have been stronger. Despite this unavailable information, grandparents' low level of current anger was still related to past physical punishment use. Thus, it may be important to help parents recognize and control their anger, even if such anger is minimal.

Regulating negative emotions and coping with stress.

Given findings in this study indicating that anger and stress are risk factors in promoting the continuity of physical punishment practices across generations, it was hypothesized that parents' abilities to regulate negative emotions and cope with stress would assist parents in breaking the intergenerational transmission of physical punishment. The National Clinical Evaluation Study reported that parent's inability to control anger was most clearly linked to abuse (Berkley Planning Associates, 1983). A parent who can regulate their anger may less likely to respond hastily to their child's misbehaviors reducing the likelihood of using physical punishment. Similarly, Folkman and Lazarus's (1980) theory of stress and coping suggests that stress endangers a person's well-being and is likely to interfere with parents' abilities to parent effectively.

The capacity to effectively cope with ones' stress may help parents use more supportive, non-physical discipline techniques.

To test the idea that effective anger regulation and stress coping skills would reduce the likelihood that parents' would repeat the physical discipline they experienced, I investigated parents who were spanked as a child and now get angry frequently, but nonetheless showed effective anger regulation techniques. Similarly, I explored whether parents' ability to cope with stress could lessen physical punishment use with one's own child, despite receiving physical punishment as a child and experiencing stress. In other words, anger regulation and stress coping may represent skills which may help parents modify their discipline behaviors under adverse conditions.

Perhaps, it is not surprising that grandparents' (G1) current difficulty regulating anger or coping with stress were not related to their physical punishment practices they used 30 years ago. It may be more important to assess the capacity for regulating emotion and coping with stress that co-occur with parenting. Thus, this idea was tested by examining the relation between parents' (G2) current physical punishment practices with their abilities to regulate anger and cope with stress. Contrary to expectations, parents' (G2) current physical punishment practices were not related to concurrent stress coping or anger regulation techniques. Moreover, the factor analysis confirmed that there were no other common underlying dimensions in the scale which might have shed different results. The factor analysis provided further evidence of the scales validity, and thus the lack of significant findings can not be attributed to weak measures.

In this study, while anger and stress were related to physical punishment use, parents who frequently punish their children physically do not appear to have any more difficulty regulating anger or coping with stress than do other parents who use less physical punishment. One explanation for this finding is that there might be two groups of parents: 1) parents who spank in response to anger or stress, as evidenced by the results within this report that link anger and stress to physical punishment, and 2) parents who also spank but are calm and not stressed. This latter group may spank their child merely because they have favorable attitudes about physical punishment. Combining these two groups who act in similar ways but differ on their level of anger and stress may have resulted in little or no link between emotion regulation and physical discipline use. Future studies could identify distinct groups of parents by assessing when parents respond to their child's misbehavior (i.e., immediately after or later) and how they felt while disciplining their child (i.e., angry and out of control, or calm and in control).

Additionally, I investigated whether parent's childhood histories of being spanked affected their ability to regulate anger or cope with stress. Researchers have noted that physical punishment is related to poor impulse control abilities in toddlers (Power & Chapieski, 1986). Moreover, increased physical and verbal aggression in adults who were spanked frequently provides additional evidence for ineffective behavioral control abilities (Cast, Schweingruber, & Berns, 2006). These studies suggest that parents who were spanked frequently have poorer regulatory abilities, and may be less effective in coping with stress or regulating their negative emotions. However, in the present study, parents who were spanked frequently did not differ from those who were not spanked

frequently on their ability to regulate anger or cope with stress. Moreover, parents who felt they were spanked *too* much as a child did not differ on their abilities to cope with stress or regulate anger compared to parents who felt they were not spanked enough as a child. Thus, these results do not support the idea that frequent physical punishment as a child impairs a parent's ability to regulate negative emotions or cope with stress.

Change in physical punishment practices.

Although this study shows that continuity across generations in physical punishment exists, overall, parents use less physical punishment today than what they experienced as a child. This finding supports the idea that some parents change. One reason why parents change is that they are constantly modify their behavior to meet the changing needs of their children as they grow older and become more independent (Baldwin, 1946). However, parents within this report showed differences with respect to discipline practices across generations, not necessarily within one generation of parents over time. Thus, this change must be conceptualized differently. A change in discipline practices across generations (and, by implication, a failure to internalize the value of using physical punishment) may stem from two separate dimensions: 1) parents' beliefs that it is wrong or ineffective to use physical punishment; and 2) a belief that although physical punishment can be a justifiable discipline option, they prefer to use other forms of discipline (Cashmore & Goodnow, 1985; Furstenberg, 1971). It appears that these two dimensions emerged in the present study.

First, it is possible that parents (G2) who were less likely to use physical punishment with their own children were those who failed to accept (e.g., internalize) the

physical punishment they received because they did not believe in the value of using physical punishment. This perception may have resulted from certain cognitive or affective appraisals about the physical punishment, since cognitive and affective appraisals are considered to be separate systems (Zajonc, 1980). For instance, parents may not believe in the effectiveness of physical punishment in changing their children's misbehaviors, or the usefulness of physical punishment as a teaching tool. Thus their cognitive appraisals about physical punishment deterred them from internalizing such practices. Alternatively, parents may have failed to internalize childhood physical punishment because they felt humiliated or angry about being physically punished. For these parents, affective appraisals about the physical punishment they received during childhood reduced the likelihood that they would internalize the physical punishment they received as a child.

Second, it is possible that parents (G2) did recognize the physical punishment they received during childhood as a valid, normal discipline option, but did not repeat these practices due to the gradually shifting ideas in society about optimal child-rearing practices. Vermulst, de Brock, and van Zupten (1991) have suggested that while continuity does exist across generation in parenting practices, this continuity is relative, not absolute. They postulate that such intergenerational continuity is moderated by a socio-cultural shift from conformist, authoritarian parenting, to more child-centered, democratic approaches. As such, this shift likely endorses alternative non-physical discipline techniques instead of physical punishment. The authors continue, however, by suggesting that this shift appears to be at least partially mediated by level of education

and/or income. Recent studies suggest that today's parents are parenting differently than how their parents parented them, such as rating themselves lower on reports of authoritarian and permissive parenting (Campbell & Gilmore, 2007) and reporting lower amounts of physical punishment than what they experienced as a child (Murphy-Cowan & Stringer, 1999). The Covell et al. (1995) study which highlighted similarities across generations was conducted nearly 15 years ago, when physical punishment was still a common discipline method. Perhaps the similarities between parents and grandparents' would be less marked, given today's shifting viewpoints about the use of physical punishment.

This study highlighted that parents are in fact changing and using less physical punishment with their own child compared to what they experienced as a child. Though income level was not related to physical punishment practices in this study, the parents participating in this study were mostly from upper-middle class background. Future studies investigating physical punishment practices across generations should actively recruit parents who have a range of income levels, including working class parents. This would lend insight as to whether physical punishment practices are in fact changing for all parents, or whether change is a function of income status.

Limitation of current study.

First, this report relied on retrospective reports. While this method of data collection is commonly used when examining physical punishment practices across generations, retrospective reports may contain error. This study used both parent and grandparent reporters in an attempt to lessen these errors but the lack of congruence

between these reporters raises questions about the validity of relying on retrospective reports. Adults may inaccurately report how often they were physically punished, especially if they themselves become parents and use physical punishment. Parents who use physical punishment with their own child, are likely to have perceived their childhood physical punishment experiences as typical, and thus may have minimized the occurrence of such events.

Additionally, given the shifting cultural norms in America regarding physical punishment, parents may have minimized their reported use of current physical punishment. This study attempted to overcome this limitation by making parental reports anonymous. It is still likely, however, that parents who used more severe physical punishment did not report what was actually done. These parents may have been fearful of a third party intervening, such as child protective services. While the effects of social desirability on parents' reports cannot be assessed, the fact that an overwhelming majority of participants reported using physical punishment suggests they were willing to report openly on this topic.

Second, while this report explored physical punishment practices across two generations from two separate reporters, parents who invited their parent to participate may have differed systematically from those who did not invite their parent to participate. Though a few steps were taken to account for this, such as controlling household income, parents who invited their parent versus those who didn't also differed on dependent variables. For instance, those who invited their parent experienced less childhood physical punishment as a child, which may have resulted in less favorable

attitudes towards physical punishment. Different trends may exist for parents who were willing to invite their parent, but who were also spanked frequently. Moreover, parents who were spanked frequently as a child may have impaired relationships with their parents, thus discouraging their desire to include their parent in this study. Such parents would be particularly interesting to investigate, especially since negative recollection of one's relationship parents tend to negatively influence the relationship the adult will have with their own child (Kretchmar & Jacobvitz, 2002; Solomon 2006).

Finally, this report did not consider the child's (G3) perspective with respect to physical punishment practices. A recent report highlighted how a child's emotional and cognitive reactions to discipline influence their compliance and, ultimately, their internalization of the discipline message (Buck, Vittrup, & Holden, 2007). Considering the child's perspective may influence parents' decisions to use or not use physical punishment and may influence children's decision to use similar or different techniques when they become parents.

Future research should incorporate observational information concerning parents' discipline practices in addition to self-reports. Though labor intensive, observational information could provide additional valuable information. For instance, some parents use shame or withdraw love when responding to their children's misbehaviors. Parents may not report using these techniques when considering their negative connotation or tone, or these techniques may be missed if reports are only concerned with physical punishment. Moreover, parents may not realize the frequency or intensity of their discipline and may inaccurately minimize this information on self-report measures.

Future studies investigating physical punishment practices across generations could be strengthened by using additional reporters to provide information about physical punishment practices, or factors related to physical punishment practices. For instance, it is possible that parents have inaccurate ideas about how often or how effectively they can cope with stress or regulate anger, which may be why I found that these reports were not related to physical punishment practices. Having the other parent, or a close confidant, report on the target parents' ability to regulate anger and cope with stress may be useful.

Studies can also be strengthened by including parents from a variety of ethnicities and income levels. Though this study welcomed minority and low income parents, those who were willing to invite their parent were more likely to be educated, older, and have a higher income. Given the hypothesis that the socio-cultural shift in using less physical punishment is partially mediated by level of education, physical punishment information across generations from lower income parents may be important to obtain.

Implication for intervention.

The goal of many family practitioners is to help parents recognize the maladaptive techniques they use when interacting with their child. Physical punishment use seems to be declining and less favorable attitudes about its use have increased. Despite this progress, physical punishment continues to be an accepted and commonly used discipline technique. Given the widely known negative child outcomes associated with physical punishment use, it is important to study ways to help parents use other forms of discipline.

In this report, favorable attitudes towards physical punishment were strongly related to parents' experiences of having received physical punishment and to their current use of physical punishment. Practitioners focused on helping parents change and use more positive techniques than those experienced as a child should focus on helping parents change their attitudes about the effectiveness and usefulness of physical punishment. Moreover, certain parents may be more resistant to change. As evidenced in this report, parents who were often physically punished more strongly endorse this discipline practice, and may be less resistant to change.

Though helping parents change their favorable attitudes about physical punishment may be effective in deterring parents from using physical punishment, results in this study indicate that other factors may still influence parents' use of physical punishment. For instance, parents who had higher levels of anger more often used physical punishment even if they had less favorable attitudes about physical punishment. Past studies have highlighted parental anger to be an important mediator in the relationship between having been sexually abused as a child and the potential for physically abusing one's own children (DiLillo, Tremblay, & Peterson, 2000). Equal attention has been given to parental stress since high levels of parental stress are associated with child abuse, especially when combined with difficult child behavior or temperament (Mash, Johnston, & Kovitz, 1983; Whipple & Webster-Stratton, 1991). Given these results, regulating anger and coping with stress were hypothesized to deter parents from using physical punishment, thereby reducing the incidence of child abuse.

Though parents' reports about anger regulation abilities and stress coping skills were unrelated to physical punishment in this report, it is likely these skills are still important to investigate. For this report, perhaps parents' perceptions of their own coping and anger regulation abilities were not accurate. Given the social desirability associated with stress coping and anger regulation, parents may overestimate their abilities to use such techniques, but in reality they are not using them. Moreover, the measures asked about general coping skills. Hence, parents may indeed regulate anger and cope with stress in general, but not when responding to their child's misbehaviors. Future studies using self-report information about coping with stress or regulating anger and its association with physical punishment use should use measures tailored more specifically towards parents. Thus, measures such as the Parenting Stress Index (Abidin, 1990) or the Parental Anger Inventory (MacMillan, Olson, & Hansen, 1988) might be better suited to capture feelings of anger and stress that may arise during parenting situations and highlight instances when parents might have the most difficulty coping or regulating their anger. Finally, these measures assessed how parents cope with stress or regulate their anger once they were already distressed or stressed. It is likely that some parents may take proactive steps to help reduce stress or calm them before they become overly stressed or angry, and this measure was unable to capture such proactive behaviors. It would seem that parents who relied on both proactive steps to help calm themselves as well as techniques to calm themselves once distressed would be those least likely to react to their child's misbehaviors in a hastily manner, and in turn less likely to use physical punishment.

Thus, it is still unknown whether regulating anger and coping with stress deters a parent from using physical punishment. Researchers focusing on intervention efforts should provide the opportunity for parents to participate in anger or stress evoking situations. This may highlight the extent to which parents really do get angry or stressed and thus, their ability, or lack there of, to regulate such anger and cope with stress. A more accurate assessment of anger and stress levels and one's capacity to regulate their anger and cope with stress may clarify its links to physical punishment. Such studies could inform interventions whose goal is to help parents use more child-centered interaction techniques, rather than responding in a hasty or out of controlled manner. Examining all possible correlates of physical punishment use is important before parents can begin to use alternative discipline methods other than physical punishment, to set appropriate limits, and promote children's own ability to regulate their emotion.

Tables

Table 1. *Descriptive information on variables for all parents (G2).*

	Descriptives			
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min. – Max.</i>
Physical Punishment Practices	211	16.63	5.63	9-43
Attitudes Towards Spanking	211	31.36	16.01	10-69
Multidimensional Anger Inventory	199	97.13	18.81	55-158
Difficulty Regulating Emotion	191	57.21	12.72	33-105
Perceived Stress Scale	186	37.76	5.31	26-53
COPE Inventory	179	110.44	15.20	62-150
How much were you disciplined? ^a	198	2.41	.97	1-5
How important was physical punishment as a primary child-rearing procedure in your family?	204	2.95	1.46	1-5
How often was the discipline effective in teaching something of importance to you?	198	2.96	1.44	1-5
How much resentment did you usually feel about being disciplined?	198	3.53	1.39	1-5

Note: ^aScores where respondents could not remember were omitted

Table 2. *Correlation among variables for all parents (G2).*

Variable	1	2	3	4	5	6	7	8	9	10
1. Physical Punishment Practices	--	.49***	.32***	.12	.28***	-.07	.21**	.18*	.22**	-.03
2. Attitudes Towards Spanking		--	.03	-.17*	.04	-.06	.24**	.26***	.41***	-.23**
3. Anger Inventory			--	.58***	.62***	-.05	-.01	.03	-.02	.23**
4. Difficulty Regulating				--	.49***	.06	-.10	-.11	-.09	.18*
5. Perceived Stress					--	-.12	-.01	-.03	-.03	.09
6. COPE Inventory						--	.01	-.07	.00	.01
7. How much were you punished? ^a							--	.63***	-.26***	.30***
8. How important was physical punishment as a primary child-rearing procedure?								--	-.14 [†]	.33***
9. How often was the punishment effective in teaching something of importance?									--	-.52***
10. How much resentment did you usually feel about being punished?										--

Note. ^aScores where respondents could not remember were omitted. [†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 3. Descriptive information on variables for subset parents (G2) and their parent (G1).

	Grandparents (Generation 1)				Subset Parents (Generation 2)			
	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min-Max</i>	<i>N</i>	<i>M</i>	<i>SD</i>	<i>Min-Max</i>
Physical Punishment Practices	62	18.95	5.09	9-32	60	16.15	4.71	9-29
Attitudes Towards Spanking	63	28.64	16.19	10-64	59	26.37	13.53	10-62
Anger Inventory	64	87.03	14.39	53-124	57	98.58	17.20	64-134
Difficulty Regulating Emotion	61	53.20	9.96	33-81	56	60.30	12.37	38-98
Perceived Stress	63	35.41	4.05	27-45	56	38.11	4.75	29-48
COPE Inventory	59	107.50	13.97	72-136	56	109.78	13.18	79-139
How much were you punished? ^a	48	2.08	.83	1-5	57	2.04	.92	1-5
How important was physical punishment as a primary child-rearing procedure in your family?	58	2.71	1.39	1-5	56	2.43	1.33	1-5
How often was the punishment effective in teaching something of importance to you?	52	3.12	1.50	1-5	54	3.13	1.37	1-5
How much resentment did you usually feel about being punished?	53	2.74	1.26	1-5	54	3.35	1.36	1-5

Note. ^a Scores where respondents could not remember were omitted.

Table 4. *Correlation among variables for subset of parents (G2).*

Variable	1	2	3	4	5	6	7	8	9	10
1. Physical Punishment Practices	--	.51**	.02	-.10	.20	.05	.24 [†]	.25 [†]	.31*	-.09
2. Attitudes Towards Spanking		--	-.12	-.23	-.01	-.00	.35**	.32*	.43**	-.21
3. Anger Inventory			--	.61***	.53***	.06	-.05	.01	.09	.11
4. Difficulty Regulating				--	.34*	.32*	.13 [†]	-.11	.06	.18
5. Perceived Stress					--	-.02	-.32*	-.13	.28*	-.17
6. COPE Inventory						--	.09	.05	-.08	.17
7. How much were you punished? ^a							--	.72***	-.06	.47**
8. How important was physical punishment as a primary child-rearing procedure?								--	.11	.34*
9. How often was the punishment effective in teaching something of importance?									--	-.35*
10. How much resentment did you usually feel about being punished?										--

Note. ^a Scores where respondents could not remember were omitted. [†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 5. *Correlation among variables for grandparents (G1).*

Variable	1	2	3	4	5	6	7	8	9	10
1. Physical Punishment Practices	--	.53***	.27*	.08	.02	.15	.24	.15	.21	-.16
2. Attitudes Towards Spanking		--	.16	.10	-.06	-.10	.01	.23 [†]	.54***	-.34*
3. Anger Inventory			--	.34**	.42**	-.18	-.25 [†]	.04	-.05	.09
4. Difficulty Regulating				--	.28*	-.04	.04	.01	-.02	.01
5. Perceived Stress					--	-.09	-.09	-.05	.16	.09
6. COPE Inventory						--	.20	.10	-.13	.09
7. How much were you punished? ^a							--	.44**	-.08	.24
8. How important was physical punishment as a primary child-rearing procedure?								--	-.19	.44**
9. How often was the punishment effective in teaching something of importance?									--	-.44**
10. How much resentment did you usually feel about being punished?										--

Note. ^aScores where respondents could not remember were omitted. [†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 6. Summary of hierarchical regression analysis for childhood experiences X feelings of resentment when predicting parent's use of physical punishment.

Step and Variable	B	SE B	β	t
Step 1				
Income	-.09	.30	-.02	-.28
Satisfaction with child's behavior	-1.19	.40	-.23	-2.92**
Step 2				
Income	.30	.30	.08	.10
Satisfaction with child's behavior	-1.21	.39	-.24	-3.10**
Childhood experiences of physical punishment ^a	1.81	.47	.33	3.88***
Feelings of resentment about being physically punished	-.78	.31	-.20	-2.49*
Step 3				
Income	.31	.29	.08	1.07
Satisfaction with child's behavior	-1.17	.37	-.23	-3.13**
Childhood experiences of physical punishment ^a	5.39	1.09	.98	4.95***
Feelings of resentment about being physically punished	1.66	.74	.43	2.24*
Childhood experiences of physical punishment ^a X	-.99	.28	-1.08	-3.61***
Feelings of resentment about being physically punished				

Note. ^a Scores where respondents could not remember were omitted.

[†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 7. Summary of hierarchical regression analysis for childhood experiences and attitudes towards spanking when predicting parents' physical punishment use.

Step and Variable	<i>B</i>	<i>SE B</i>	β	<i>t</i>
Step 1				
Income	-.15	.29	-.04	-.52
Satisfaction with child's behavior	-1.09	.38	-.22	-2.86**
Step 2				
Income	.16	.30	.04	.53
Satisfaction with child's behavior	-1.12	.37	-.23	-3.02**
Childhood experiences of physical punishment ^a	1.45	.43	.27	3.41**
Step 3				
Income	.40	.26	.11	1.54
Satisfaction with child's behavior	-.97	.32	-.20	-2.99**
Childhood experiences of physical punishment ^a	.86	.38	.16	2.26*
Attitudes towards spanking	.17	.02	.49	7.03***

Note. ^a Scores where respondents could not remember were omitted.

[†] $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 8. Summary of hierarchical regression analysis for childhood experiences, anger, and ability to regulate anger when predicting parents' physical punishment use.

Step and Variable	<i>B</i>	<i>SE B</i>	β	<i>t</i>
Step 1				
Income	-.18	.29	-.05	-.62
Satisfaction with child's behavior	-1.04	.38	-.21	-2.70**
Step 2				
Income	.14	.30	.04	.45
Satisfaction with child's behavior	-1.07	.37	-.22	-2.88**
Childhood experiences of physical punishment ^a	1.46	.42	.28	3.43**
Step 3				
Income	.19	.30	.05	.64
Satisfaction with child's behavior	-.85	.39	-.18	-2.20*
Childhood experiences of physical punishment ^a	1.50	.42	.29	3.57***
Feelings of anger	.05	.02	.16	1.94*
Step 4				
Income	.17	.30	.05	.56
Satisfaction with child's behavior	-.82	.39	-.17	-2.11*
Childhood experiences of physical punishment ^a	1.52	.42	.29	3.59***
Feelings of anger	.04	.03	.12	1.28
Difficulty regulating anger	.02	.04	.05	.47

Note. ^a Scores where respondents could not remember were omitted.

† $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 9. Summary of hierarchical regression analysis for childhood experiences, stress, and ability to cope with stress when predicting parents' physical punishment use.

Step and Variable	<i>B</i>	<i>SE B</i>	β	<i>t</i>
Step 1				
Income	-.18	.30	-.05	-.60
Satisfaction with child's behavior	-1.10	.38	-.23	-2.88**
Step 2				
Income	.13	.30	.04	.44
Satisfaction with child's behavior	-1.13	.37	-.23	3.42**
Childhood experiences of physical punishment ^a	1.45	.43	.27	3.42**
Step 3				
Income	.23	.30	.06	.76
Satisfaction with child's behavior	-.87	.38	-.18	-2.29*
Childhood experiences of physical punishment ^a	1.50	.42	.28	3.58***
Feelings of stress	.20	.08	.19	2.41*
Step 4				
Income	.22	.30	.06	.73
Satisfaction with child's behavior	-.86	.38	-.18	-2.25*
Childhood experiences of physical punishment ^a	1.51	.42	.28	3.60***
Feelings of stress	.19	.08	.18	2.32*
Ability to cope with stress	-.02	.03	-.07	-.88

Note. ^a Scores where respondents could not remember were omitted. † $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

Table 10. *HLM model predicting parents' (G1 and G2) physical punishment use.*

		Model A	Model B	Model C	Model D	Model E	Model F	Model G
Fixed Effects								
Initial Status	Intercept	17.64*** (.48)	16.19*** (.60)	16.32*** (.55)	15.98*** (.58)	16.07*** (.56)	16.01*** (.58)	15.97*** (.56)
Rate of change (generation)	Intercept		2.80*** (.79)	2.51*** (.75)	3.21*** (.75)	3.17*** (.76)	3.27*** (.76)	3.39*** (.79)
Rate of change (attitudes)				0.17*** (.03)	0.17*** (.03)	0.17*** (.03)	0.17*** (.03)	0.17*** (.03)
Rate of change (anger)					0.07*** (.02)	.05† (.03)	0.04 (.03)	0.05 (.03)
Rate of change (anger regulation)						-0.0006 (.04)	-0.005 (.04)	-0.02 (.04)
Rate of change (stress)							0.12 (.10)	0.12 (.10)
Rate of change (stress coping)								0.05 (.03)
Variance Components								
Level 1	Within-person	22.66 (4.76)	19.30 (4.39)	16.83 (4.10)	13.79 (3.71)	13.13 (3.62)	13.06 (3.61)	13.73 (3.71)
Level 2	Initial status	3.17 (1.78)	4.65 (2.16)	1.17 (1.08)	4.12 (2.03)	4.19 (2.05)	4.20 (2.05)	2.35 (1.53)
Goodness of fit								
	Deviance	750.95	739.72	694.05	681.95	660.25	659.76	641.37
	AIC	754.95	743.72	698.05	685.95	664.25	663.76	645.37
	BIC	759.29	748.06	702	620.29	668.59	668.10	649.65

† $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

APPENDIX A

Are you the same as your parent ...or *different*?



If you have a child between the ages of 2-6, help a UT graduate student with her research on parenting emotions and parenting discipline practices across generations.

What to do: To be a part of this research survey, go to the following webpage



<http://parentingsurveys.kids.homepagenow.com>

The survey takes approx 45 mins.
Participate while at home or the office.
No additional requirements or contact is necessary!!!

Rewards: Once finished, you will be entered into a drawing to win great prizes such as gift cards to HEB, Amy's Ice Cream, Target, various restaurants and more!!!



Want more information? Want a hard copy of the survey?

Contact Amy Roetzel at 471-1740 or
aroetzel@mail.utexas.edu

Thanks for all your support with my education!!!!

Thank you for your interest in this research project. If you would prefer to participate, but not online, please indicate your preferred method.

Drop off at my child's center

Mail

Please provide us with the following information. This information is private and will NOT be given out to anyone. After we record your answers from the questionnaires, we will destroy all of this personal information.

Your Name: _____

Your Address: _____

Your Phone: _____

Your Email: _____

This family study focuses on the extent to which parents raise their children in the same way as they were raised. So we would also like at least one of your parents to participate. We ask that you please provide us with a mailing address and email for at least one of your parents and we will send a letter inviting them to participate. However, we would like you to participate even if your parents do not participate. You do not have to provide us with your parent's contact information. Please leave this section blank if you do not want us to invite your parent to participate in this family study. Again, this information will NOT be given out to anyone.

Your Parent's Name: _____

Your Parent's Address: _____

Your Parent's Phone: _____

Your Parent's Email: _____

APPENDIX B
Background Information

I. Since this family study focuses on the extent to which parents raise their children in the same way as they were raised, we would also like at least one of your parents to participate. If you would like them to participate, please provide us with a mailing address and email for at least one of your parents and we will send a letter or email inviting them to participate. However, we would like you to participate even if your parents do not participate.

- Yes, I will provide their contact information below
- No, my parent(s) are deceased
- No, my parents do not read or write English
- No, I do not wish for you to contact my parent for the following reason:
(please indicate) _____

Your Parent's Name: _____

Your Parent's Address: _____

Your Parent's Phone: _____

Your Parent's Email: _____

II. Please answer the following questions about yourself and your household:

1. Your age: _____

2. Your education:

- | | |
|--|---|
| <input type="checkbox"/> No high school | <input type="checkbox"/> Finished college |
| <input type="checkbox"/> Finished high school | <input type="checkbox"/> Graduate school |
| <input type="checkbox"/> Some post high school | |

3. What is your current employment status:

- | | |
|---|--|
| <input type="checkbox"/> employed | <input type="checkbox"/> part-time student |
| <input type="checkbox"/> retired | <input type="checkbox"/> full-time student |
| <input type="checkbox"/> unemployed; looking for work | |
| <input type="checkbox"/> unemployed; not looking for work (include sick, disabled, on strike, etc.) | |

4. If employed:

a. Occupation name/title: _____

b. What is the average number of hours per week that your work: _____

c. Please rate your overall level of satisfaction with your job by circling a number on the following scale

1	2	3	4	5	6	7
Very dissatisfied		Somewhat dissatisfied		Somewhat satisfied		Very satisfied

5. Marital status:

_____ single
_____ married
_____ separated/ divorced
_____ remarried

6. Your ethnicity:

_____ Caucasian
_____ Latino
_____ Asian American
_____ African American
_____ Native American

Other: _____

7. Your income:

_____ \$0 to \$20,000
_____ \$20,001 to \$40,000
_____ \$ 40,001 to \$60,000
_____ \$ 60,001 to \$80,000
_____ over \$80,000

8. Joint income (if applicable):

_____ \$0 to \$20,000
_____ \$20,001 to \$40,000
_____ \$ 40,001 to \$60,000
_____ \$ 60,001 to \$80,000
_____ over \$80,000

9. Your religion: a. Christian b. Jewish c. Buddhist d. Islamic

e. Hindu f. Atheist g. Agnostic

10. Please rate from **1 to 10** (1=strongly disagree; 10= strongly agree) how much you agree with the following statement:

“My religious/ spiritual beliefs are what really lie behind my whole approach to life.”

I rate this statement at: _____

7. Who most often disciplines your child (includes physical and nonphysical discipline)?

_____ I am usually the parent responsible for disciplining my child and/or the parent who most often disciplines.

_____ My spouse, or child's other parent, is responsible for disciplining my child and/or the parent who most often disciplines.

_____ We share the responsibility equally and/or implement discipline the same number of times.

_____ My child does not spend time with his/her other parent.

8. Do you and your spouse, or child's other parent, agree on discipline techniques (includes physical and non-physical discipline techniques)?

_____ Yes

_____ No

_____ My child does not spend time with his/her other parent

9. If you differ in discipline techniques, what does the other parent do that you do not?

10. Do you feel that you currently parent your child the same way that you were parented?

_____ Yes

_____ No

_____ In a few ways

_____ I can't remember

11. In what ways do you feel you are different than your parent in terms of parenting techniques?

12. Is this difference purposeful, meaning, do you actively try to use different parenting techniques?

_____ Yes, I made a decision before have a child or while my child was still very young to do things differently than my parent.

_____ Yes, I seek professional or outside parenting advice which helps me to use different parenting techniques.

_____ Yes, I chose to parent differently than my parent once I noticed techniques from my childhood not working.

_____ No, I am different than my parent, but it just happened that way without me thinking about it.

_____ My parent and I share same parenting techniques/philosophy so we are more alike than different.

_____ Other: _____

APPENDIX C

Current Parenting Practices Scale (CPPS)

Use the following scale to indicate how often you use the following discipline techniques with your child (who is 2-6 years old) when typically responding to their misbehaviors.

Never	Almost Never (I did this once)	Seldom (I did this 2- 3 times)	Occasionally (I did this a hand-full of times)	Often (I usually did this)	Very Often (I did this more often than not)	Always
1	2	3	4	5	6	7

How often do you:

- _____ *1. Use open-handed spanking confined to your child's buttocks?
- _____ *2. Use open-handed spanking to areas other than your child's buttocks (i.e., their legs or arms)?
- _____ 3. Offer specific alternatives to what the child should have done or could do?
- _____ 4. Use time-out methods?
- _____ *5. Grab your child's arm?
- _____ 6. Respond to your child's misbehavior immediately?
- _____ 7. Yell at your child in anger?
- _____ *8. Pinch your child?
- _____ 9. Send your child to a room where they are by themselves?
- _____ *10. Pull on your child's body? For example, their ear?
- _____ *11. Grab your child so they can see the anger in your face?
- _____ 12. Tell your child what they did wrong?
- _____ *13. Use objects when disciplining your child? For example, a belt?
- _____ 14. Take away privileges?

- _____ 15. How often do you feel you need to calm down before responding to your child's misbehavior?
- _____ 16. Make sure your child cries so they know they did something wrong?
- _____ 17. How often do you regret using a particular discipline method afterwards?
- _____ 18. When your child misbehaves, how often did you feel angry?
19. What is the most common discipline technique you use when responding to your child's misbehavior? _____
20. Regardless of whether you have used physical punishment, why do you *think* a parent might use physical punishment? _____
-

Note. Items with *asterisk denote the items which were summed to calculate parents physical punishment use.

APPENDIX D
Discipline Questionnaire

Please recall how you were physically punished growing up. While there are many forms of physical punishment, we will focus on only a few. We will define physical punishment as occurring when: “An adult (18 years or older) intentionally disciplines a minor (under 18) and, in the process, causes physical pain to the minor.”

The pain felt by the minor may range from very mild and brief (such as a slap on the hand) to much more severe and lasting. The physical punishment may be in the following forms: spanking, hitting, slapping, punching, kicking, pinching, twisting, pulling, or shaking. If you recall even minor slaps or spankings, these are considered physical punishment and are of interest to us.

Part I: Discipline Questionnaire- Your Past History

1. While growing up, did you ever receive physical punishment (even if only once)? Y N

2. At what age do you first remember being physically punished?

Before the age of 3 3-6 years of age 7-10 years of age

Older than 10 N/A

3. While growing up, how often were you physically punished?

Daily (5)	A Few Times a Week (4)	A Few Times a Month (3)	A Few Times a Year (2)	Never (1)	Don't Know (6)
--------------	------------------------------	-------------------------------	------------------------------	--------------	-------------------

4. How often were other family members physically punished?

Daily (5)	A Few Times a Week (4)	A Few Times a Month (3)	A Few Times a Year (2)	Never (1)	Don't Know (6)
--------------	------------------------------	-------------------------------	------------------------------	--------------	-------------------

5. How important was physical punishment as a primary child-rearing procedure in your family?

Not at All Important	Very Important
1 2 3 4	5

6. Who physically punished you? (check all that apply)

- | | |
|--|---|
| <input type="checkbox"/> Mother
<input type="checkbox"/> Father
<input type="checkbox"/> Adult Sister/ Brother
<input type="checkbox"/> Other (Identify: _____)
<input type="checkbox"/> I was never physically punished | <input type="checkbox"/> Stepparent
<input type="checkbox"/> Grandparent |
|--|---|

7. Of the people checked above, who punished you the most? _____

8. From before the age of 5, about how frequently were you physically punished?

Daily	A Few Times a Week	A Few Times a Month	A Few Times a Year	Never	Don't Know
(5)	(4)	(3)	(2)	(1)	(6)

9. From before the age of 5, how severe was the physical punishment you usually received?

- caused injury more severe than welts and bruises
- caused welts and bruises but no other injury
- caused considerable pain but no welts, or other injury
- caused moderate pain
- caused mild pain
- I was never physically punished

10. From ages 5-12, about how frequently were you physically punished?

Daily	A Few Times a Week	A Few Times a Month	A Few Times a Year	Never	Don't Know
(5)	(4)	(3)	(2)	(1)	(6)

11. From ages 5-12, how severe was the physical punishment you usually received?

- caused injury more severe than welts and bruises
- caused welts and bruises but no other injury
- caused considerable pain but no welts, or other injury
- caused moderate pain
- caused mild pain
- I was never physically punished

12. From ages 13-17, about how frequently were you physically punished?

Daily	A Few Times a Week	A Few Times a Month	A Few Times a Year	Never	Don't Know
(5)	(4)	(3)	(2)	(1)	(6)

13. From ages 13-17, how severe was the physical punishment that you usually received?

- caused injury more severe than welts and bruises
- caused welts and bruises but no other injury
- caused considerable pain but no welts, or other injury
- caused moderate pain
- caused mild pain
- I was never physically punished

14. Many families use a variety of discipline techniques. Please check all that you remember receiving.

- | | |
|--|---|
| <input type="checkbox"/> Spanking | <input type="checkbox"/> Arm-twisting |
| <input type="checkbox"/> Hair/ ear pulling | <input type="checkbox"/> Punching |
| <input type="checkbox"/> Slapping | <input type="checkbox"/> Shaking |
| <input type="checkbox"/> Kicking | <input type="checkbox"/> Whipping |
| <input type="checkbox"/> Pinching | <input type="checkbox"/> Other (list) _____ |
| <input type="checkbox"/> I was never physically punished | |

15. Of the punishments above, which one did you receive the most? _____

16. The most severe physical punishment that you ever received (check one)

- caused injury more severe than welts and bruises
- caused welts and bruises but no other injury
- caused considerable pain but no welts, or other injury
- caused moderate pain
- caused mild pain
- I was never physically punished

17. How old were you when this incident occurred? _____

18. Were objects ever used in the physical punishment?

Never		About Half the Time		Always	N/A
1	2	3	4	5	6

19. What objects were used (other than hands or feet)? Please list in order of frequency.

The following questions pertain to discipline in general, and not limited to physical punishment.

20. Usually how did the person act while disciplining you? Circle the appropriate degree of each of the following

a.	Extremely Angry				Not Angry
	1	2	3	4	5
b.	Loving				Hateful
	1	2	3	4	5
c.	Controlled				Out of Control
	1	2	3	4	5

21. Usually, how justified was the person who physically disciplined you?

Completely Unjustified	Somewhat Unjustified	Not Certain	Somewhat Justified	Completely Justified
1	2	3	4	5

22. How often was the physical discipline effective in getting you to do what the adult wanted?

Never Effective		About Half the Time		Always Effective
1	2	3	4	5

23. How often was the physical discipline effective in teaching something of importance to you?

Never Effective		About Half the Time		Always Effective
1	2	3	4	5

24. How much resentment did you usually feel about being physically disciplined?

None	A Little	Some	Much	A Great Deal
1	2	3	4	5

25. How often did you deserve the physical discipline?

Never		About Half the Time		Always
1	2	3	4	5

26. How much were you disciplined physically?

Not Enough		About the Right Amount		Too Much
1	2	3	4	5

27. What was the most common discipline technique (includes physical or non-physical) your parents used when responding to your misbehavior?

Part II: Discipline Questionnaire- Your opinions about physical punishment

How much do you agree with the following statements?

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1. Parents should have the right to physically punish their children	1	2	3	4	5
2. Physical punishment is helpful for children	1	2	3	4	5

- | | | | | | |
|--|---|---|---|---|---|
| 3. I intend to use physical punishment with my own children | 1 | 2 | 3 | 4 | 5 |
| 4. Children need to be physically punished | 1 | 2 | 3 | 4 | 5 |
| 5. Physical punishment is harmful | 1 | 2 | 3 | 4 | 5 |
| 6. Physical punishment is a proper child-rearing technique | 1 | 2 | 3 | 4 | 5 |
| 7. Physical punishment used on children is abusive | 1 | 2 | 3 | 4 | 5 |
| 8. Teachers and principals should have the right to physically punish their pupils | 1 | 2 | 3 | 4 | 5 |

9. Rate each of the following types of discipline on how appropriate you think it is.

	Never Appropriate (never okay)	1	2	Somewhat (sometimes okay)	3	4	Always (always okay)	5
Spanking	1	2	3	4	5			
Punching	1	2	3	4	5			
Slapping	1	2	3	4	5			
Kicking	1	2	3	4	5			
Pinching	1	2	3	4	5			
Arm-twisting	1	2	3	4	5			
Hair/ ear pulling	1	2	3	4	5			
Shaking	1	2	3	4	5			

10. Of the punishments listed above, which one is the most appropriate?

APPENDIX E

Attitudes Towards Spanking

Using the rating scale below, rate how much you agree or disagree with each statement about spanking your child(ren).

	Strongly Disagree	Moderately Disagree	Slightly Disagree	Neither	Slightly Agree	Moderately Agree	Strongly Agree
1. Spanking is a <u>normal part</u> of parenting.	1	2	3	4	5	6	7
2. Sometimes spanking is the <u>best way</u> to get children to listen.	1	2	3	4	5	6	7
3. Spanking does <u>not</u> bring about long-term changes in children's behavior.	1	2	3	4	5	6	7
4. Spanking is <u>never necessary</u> to teach a child right from wrong.	1	2	3	4	5	6	7
5. Sometimes, the <u>only way</u> to get a child to behave is with a spanking.	1	2	3	4	5	6	7
6. Spanking is one of the best ways for a child to learn what " <u>no</u> " means.	1	2	3	4	5	6	7
7. If I spank a child once for something, I should spank <u>every time</u> he/she does it.	1	2	3	4	5	6	7

8. Generally, spanking is <u>harmful</u> for a child.	1	2	3	4	5	6	7
9. I believe <u>parents</u> have the right to spank their children if they think it is necessary.	1	2	3	4	5	6	7
10. Overall, I believe spanking is a <u>bad</u> way to discipline a child.	1	2	3	4	5	6	7

1 Completely Undescriptive	2 Mostly Undescriptive	3 Partly Undescriptive & Partly Descriptive	4 Mostly Descriptive	5 Completely Descriptive
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28. I am on my guard with people who are friendlier than I expected.

1 2 3 4 5

29. It's difficult for me to let people know I'm angry.

1 2 3 4 5

30. I get angry when:

a. someone lets me down.

1 2 3 4 5

b. people are unfair.

1 2 3 4 5

c. something blocks my plans

1 2 3 4 5

d. I am delayed.

1 2 3 4 5

e. someone embarrasses me.

1 2 3 4 5

f. I have to take orders from someone less capable than I.

1 2 3 4 5

g. I have to work with incompetent people.

1 2 3 4 5

h. I do something stupid.

1 2 3 4 5

i. I am not given credit for something I have done.

1 2 3 4 5

APPENDIX G
Difficulties Regulating Anger

ID # _____

Please indicate how often the following statements apply to you by circling in the appropriate number from the scale. Though the word “angry” is used, you can also think of times feeling frustrated, upset or distressed.

	Almost never	Sometimes	About half the time	Most of the time	Almost always
1. When I'm angry, I acknowledge my emotions.	1	2	3	4	5
2. When I'm angry, I become angry with myself for feeling that way.	1	2	3	4	5
3. When I'm angry, I become embarrassed for feeling that way.	1	2	3	4	5
4. When I'm angry, I have difficulty getting work done.	1	2	3	4	5
5. When I'm angry, I become out of control	1	2	3	4	5
6. When I'm angry, I believe that I will remain that way for a long time.	1	2	3	4	5
7. When I'm angry, I believe that I'll end of feeling very depressed.	1	2	3	4	5
8. When I'm angry, I believe that my feelings are valid and important.	1	2	3	4	5
9. When I'm angry, I have difficulty focusing on other things.	1	2	3	4	5
10. When I'm angry, I feel out of control.	1	2	3	4	5
11. When I'm angry, I can still get things done.	1	2	3	4	5
12. When I'm angry, I feel ashamed with myself for feeling that way.	1	2	3	4	5
13. When I'm angry, I know that I can find a way to eventually feel better.	1	2	3	4	5
14. When I'm angry, I feel like I am weak.	1	2	3	4	5

15. When I'm angry, I feel like I can remain in control of my behaviors.	1	2	3	4	5
16. When I'm angry, I feel guilty for feeling that way.	1	2	3	4	5
17. When I'm angry, I have difficulty concentrating.	1	2	3	4	5
18. When I'm angry, I have difficulty controlling my behaviors.	1	2	3	4	5
19. When I'm angry, I believe that there is nothing I can do to make myself feel better.	1	2	3	4	5
20. When I'm angry, I become irritated with myself for feeling that way.	1	2	3	4	5
21. When I'm angry, I start to feel very bad about myself.	1	2	3	4	5
22. When I'm angry, I believe that wallowing in it is all I can do.	1	2	3	4	5
23. When I'm angry, I lose control of my behaviors	1	2	3	4	5
24. When I'm angry, I have difficulty thinking about anything else.	1	2	3	4	5
25. When I'm angry, I take time to figure out what I'm really feeling.	1	2	3	4	5
26. When I'm angry, it takes me a long time to feel better.	1	2	3	4	5
27. When I'm angry, my emotions feel overwhelming.	1	2	3	4	5

APPENDIX H

ID #: _____

Perceived Stress Index

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate how often you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer each question fairly quickly. That is, don't try to count up the number of times you felt a particular way, but rather the alternative that seems like a reasonable estimate.

1. In the last month, how often have you been upset because of something that happened unexpectedly?

1 never 2 almost never 3 sometimes 4 fairly often 5 very often

2. In the last month, how often have you felt that you were unable to control the important things in your life?

1 never 2 almost never 3 sometimes 4 fairly often 5 very often

3. In the last month, how often have you felt nervous and stressed?

1 never 2 almost never 3 sometimes 4 fairly often 5 very often

4. In the last month, how often have you dealt successfully with irritating life hassles?

1 never 2 almost never 3 sometimes 4 fairly often 5 very often

5. In that last month, how often have you felt that you were effectively coping with important changes that were occurring in your life?

1 never 2 almost never 3 sometimes 4 fairly often 5 very often

6. In the last month, how often have you felt confident about your ability to handle your personal problems?

1 never 2 almost never 3 sometimes 4 fairly often 5 very often

7. In the last month, how often have you found that you could not cope with all the things that you had to do?
- 1 never 2 almost never 3 sometimes 4 fairly often 5 very often
8. In the last month, how often have you felt things were going your way?
- 1 never 2 almost never 3 sometimes 4 fairly often 5 very often
9. In the last month, how often have you been able to control irritations in your life?
- 1 never 2 almost never 3 sometimes 4 fairly often 5 very often
10. In the last month, how often have you felt that you were on top of things?
- 1 never 2 almost never 3 sometimes 4 fairly often 5 very often
11. In the last month, how often have you been angered because of things that happened that were outside of your control?
- 1 never 2 almost never 3 sometimes 4 fairly often 5 very often
12. In the last month, how often have you found yourself thinking about things that you have to accomplish?
- 1 never 2 almost never 3 sometimes 4 fairly often 5 very often
13. In the last month, how often have you been able to control the way you spend your time?
- 1 never 2 almost never 3 sometimes 4 fairly often 5 very often
14. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?
- 1 never 2 almost never 3 sometimes 4 fairly often 5 very often

APPENDIX I

ID #: _____

COPE

We are interested in how you coped with stressful situations/events in the past. Please indicate the degree to which each of the coping strategies listed below were used in dealing with stressful situations/event in general.

- 1= I didn't do this at all
- 2= I did this a little bit
- 3= I did this a medium amount
- 4= I did this a lot

- ____ 1. I tried to grow as a person as a result of the experience.
- ____ 2. I got upset and let my emotions out.
- ____ 3. I tried to get advice from someone about what to do.
- ____ 4. I concentrated my efforts on doing something about it.
- ____ 5. I said to myself "this isn't real."
- ____ 6. I restrained myself from doing anything too quickly.
- ____ 7. I discussed my feelings with someone.
- ____ 8. I got used to the idea that it happened.
- ____ 9. I talked to someone to find out more about the situation.
- ____ 10. I kept myself from getting distracted by other thoughts or activities.
- ____ 11. I got upset, and was really aware of it.
- ____ 12. I made a plan of action.
- ____ 13. I accepted that it had happened and that it couldn't be changed.
- ____ 14. I help off doing anything about it until the situation permitted.
- ____ 15. I tired to get emotional support from friends or relatives.
- ____ 16. I took additional action to try to get rid of the problem.
- ____ 17. I refused to believe that it happened.
- ____ 18. I let my feelings out.
- ____ 19. I tried to see it in a different light, to make it seem more positive.

1= I didn't do this at all
2= I did this a little bit
3= I did this a medium amount
4= I did this a lot

- ___ 20. I talked to someone who could do something concrete about the problem.
- ___ 21. I tried to come up with a strategy about what to do.
- ___ 22. I focused on dealing with the problem, and when necessary let other things slide a little.
- ___ 23. I got sympathy and understanding from someone.
- ___ 24. I looked for something good in what was happening.
- ___ 25. I thought about how I might best handle the problem.
- ___ 26. I pretended that it hadn't really happened.
- ___ 27. I made sure not to make matters worse by acting too soon.
- ___ 28. I tried hard to prevent other things from interfering with my efforts at dealing with the problem.
- ___ 29. I accepted the reality of the fact that it had happened.
- ___ 30. I asked people who have had similar experiences, what they did.
- ___ 31. I felt a lot of emotional distress and found myself expressing those feelings a lot.
- ___ 32. I took direct action to get around the problem.
- ___ 33. I forced myself to wait for the right time to do something.
- ___ 34. I talked to someone about how I felt.
- ___ 35. I learned to live with it.
- ___ 36. I put aside other activities in order to concentrate on the problem.
- ___ 37. I thought hard about what steps to take.
- ___ 38. I acted as though it hadn't even happened.
- ___ 39. I did what had to be done, one step at a time.
- ___ 40. I learned something from the experience.

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