

**Christian fundamentalism and the reported use of corporal punishment**

**by**

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Dedication

One day while on a hike,  
someone gentle and kind reached over and took my hand and held on to me.  
I knew love for the first time,  
and, she has made all the difference.  
That is why,  
I dedicate this work to my best friend,  
Karen Margaret Lossing Ross.  
Who, each day, has made my life just a little bit better.  
Karen I love you.  
Thanks for being patient.

Jim

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## INTRODUCTION

### Purpose of the Study

The purpose of this study is to examine the relationship between adherence to Christian fundamentalist beliefs and reported use of corporal punishment by parents with preschool children. Parent's religiosity and parent's view of the importance of the child's obedience are posited to function as intervening variables in this relationship. Selected socioeconomic and sociodemographic variables are used as control variables in the analysis. The purpose is accomplished through the analysis of data from the National Survey of Families and Households.

For the purposes of this study, corporal punishment is defined as "the use of physical force with the intention of causing a child to experience pain but not injury, for purposes of correction or control of the child's behavior" (Straus & Donnelly, 1993, p. 420). Christian fundamentalism is defined as adherence to the verbal and inerrant inspiration of the Bible, belief in the virgin birth of Jesus Christ, the substitutionary atonement of his death, his bodily resurrection, and his imminent return (Johnstone, 1983; Dollar, 1973). Religiosity is defined as the degree of commitment and involvement in one's religious group. Obedience is defined as the degree of importance one has regarding compliance to a set of rules and/or commands put forth by some authority.

### Importance of the Study

In general, conservative Christians, and specifically Christian fundamentalists, tend to be associated with the support and use of corporal punishment as a form of discipline for children. Recent studies indicate that there is strong normative support of corporal punishment among conservative Christians (Ellison & Sherkat, 1993a; Wiehe, 1990). Conservative Christian writers of child-rearing literature strongly advocate using corporal punishment as a form of discipline for disobedient children. Other researchers have implied that a relationship exists between those who espouse conservative Christian beliefs and child abuse (Capps, 1992; Neufield, 1979). In spite of both advocacy of corporal punishment and support for its use, however, there has been no research relating Christian fundamentalist beliefs to the actual use of corporal punishment. That void is filled by this study.

## LITERATURE REVIEW

In this chapter literature is reviewed on Christian fundamentalism, corporal punishment, and religiosity. In the first section, Christian fundamentalism is examined in light of its historic beginnings, measurement issues, and factors identified with adherence to its basic doctrinal tenets.

### Christian Fundamentalism

#### Historical perspective and definition

Christian fundamentalism as a formal movement began in the late nineteenth century. A series of Bible conferences were held throughout the United States to gather a consensus as to what characterized a “true” Christian (Bruce, 1984; Falwell, 1981). Specific criteria were agreed upon and published in a twelve-volume pamphlet entitled The Fundamentals (Dixon, 1910-1915). The basic essentials to the Christian faith, summarized in the first volume, are the acceptance and belief in the verbal and inerrant inspiration of the Bible, in the virgin birth of Jesus Christ, in the bodily resurrection of Jesus Christ from the tomb, in the substitutionary atonement of Jesus Christ, and in the imminent second coming of Jesus Christ (Johnstone, 1983; Dollar, 1973).

In their study assessing the effects of various operational measures of Christian fundamentalism on outcome variables, Kellstedt and Smidt (1991) acknowledge the resurgence of the Christian fundamentalist movement over the past two decades and the interest in scientific study of the movement. Their study points to the need, in the scientific

community, for a consensus concerning a definition for Christian fundamentalism.

Ammerman (1991) postulated four basic dimensions of Christian fundamentalism. First, Christian fundamentalists are evangelical, emphasizing the sharing of their faith with nonbelievers. Second, Christian fundamentalists are Biblical inerrantists, viewing the Bible as the final authority for doctrine and practice, with every word regarded as inerrant and fully divine, with no authority above or equal to it (Barr, 1978; Beale, 1986; Boone, 1989; Bruce, 1983). Christian fundamentalists also are characterized by their premillennial view of the end of the world. They differ distinctly from other Christians in that fundamentalists believe that Jesus Christ will return at any time. Christian fundamentalists also are separatists. They constitute an “organic entity, in which members have forged a common identity, communicate with each other...and share certain values and norms not shared by those outside their group” (Kellstedt & Smidt, 1991, p. 260). Separation from the world results in a refusal to cooperate with others whose lives and beliefs do not meet their standards (Ammerman, 1987; Marty, 1983).

### Measurement

As researchers became more involved with the study of the conservative Christian movement, attempts were made to distinguish Christian fundamentalists from other Christians. For the purposes of this study, Christian fundamentalists are best conceptualized as being a subset of a larger, more inclusive group referred to in the literature as evangelical Christians. The primary difference between the two groups is the degree to which Christian fundamentalists adhere to the belief in an inerrant Bible. Coupled with this view is a strong



belief in a literal interpretation of the Bible. Hunter's (1981) proposal of specific criteria for the operationalization of evangelicalism was challenged by Ammerman (1982). Hunter asserted that using a measure of biblical literalism was adequate for identifying evangelicals. Ammerman (1982), in a critique of Hunter's proposal, asserted that Hunter's criteria were not identifying evangelicals, but were actually identifying Christian fundamentalists, a sub-group of evangelicals. Citing her own research (Ammerman, 1983) and that of Quebedeaux (1974), Ammerman asserted that "fundamentalists subscribe to inerrancy; not all evangelicals do." To identify Christian fundamentalists, Ammerman proposed indicators that would include questions regarding the divinity of Jesus Christ, a "born again" experience, belief in Biblical literalism, and specific questions regarding the literalness of the creation story in the Old Testament.

A review of the literature reveals that researchers have used varying methods in their measurement of Christian fundamentalism. There are three distinct approaches; theological beliefs, denominational affiliation, and self-identification procedures (Kellstedt & Smidt, 1991).

Theological beliefs Various studies have used measures relative to the theological beliefs of the respondent, particularly beliefs about the Bible and beliefs about the necessity of a personal conversion experience related to Jesus Christ, as indicators of Christian fundamentalism. For example, some researchers have constructed scale-item measures of Christian fundamentalism, combining variables that measure the respondent's beliefs regarding Biblical literalism and/or Biblical inerrancy (De Jong & Ford, 1965; McFarland &

Warren, 1992; Monaghan, 1970) or combining the Biblical beliefs indicators along with a self-reported measure of a “born again” conversion experience (Raymond & Norrander, 1990; Wilcox, 1989).

Christian fundamentalism also has been measured using a four-item scale assessing the respondent’s beliefs pertaining to: 1) Biblical literalism, 2) a millennial view of the end of the world, 3) the existence of evil in the world and, 4) the role God plays in the respondent’s daily life (Burton, Johnson, & Tamney, 1989). Some researchers have used the report of a “born again” conversion experience as a single-item indicator of Christian fundamentalism (Tamney, Johnson, & Burton, 1992; Wilcox, 1992). In a test of Ammerman’s proposal, Dixon, Jones, and Lowery (1992) found that questions regarding the literalness of the whole Bible, rather than just the creation story in the book of Genesis, were better indicators of religious conservatism and, in particular, of self-identified Christian fundamentalists.

Denominational preference Kellstedt and Smidt (1991) assert that denominational affiliation is a valid measure of Christian fundamentalism, even though some respondents may not identify themselves as fundamentalists. They assert that “it is the social group membership, rather than doctrinal beliefs, which is presumed to affect attitudes and behaviors” (p. 111). Many researchers classify denominations along a continuum ranging from fundamentalist to nonfundamentalist (Beck, Cole, & Hammond, 1991; Ethridge & Feagin, 1979; Grasmick, Bursik, & Cochran, 1991; Kellstedt & Smidt, 1991).

There is evidence of a strong relationship between belief in Biblical literalism and denominational preference. Ellison and Sherkat (1993a) found that “members of conservative

Protestant denominations are twice as likely as other individuals...to adopt the position that the Bible should be interpreted literally” (p. 137).

Self-identification Many researchers use a single-item indicator of Christian fundamentalism operationalized by giving the respondent an opportunity to identify him/herself as a fundamentalist. Others use a self-report measure having the respondent indicate to what degree he or she identifies with the label of Christian fundamentalist (Balswick, 1975; Berg, 1971; Ethridge & Feagin, 1979; Jelen, 1984; Smidt, 1988; Wilcox, 1986).

#### Factors associated with Christian fundamentalism

Gender In general, females are more likely than males to hold Christian fundamentalist beliefs (Ellison & Sherkat, 1993; Gallup & Castelli, 1989). Ellison and Sherkat (1993) found that females were more than 50 percent more likely than males to embrace Biblical literalism. Gallup and Castelli (1989) reported that women were more likely than men to be church members, pray, read the Bible, and believe that the Bible is the literal word of God (women 34%, men 27%). Wood (1990) found that a greater percentage of women than men (37% to 26%) reported having a literal belief in the Bible.

Age For the most part, age has been found to have little influence on the respondent's likelihood to hold Christian fundamentalist beliefs. Reports vary, however. Ellison and Sherkat (1993) reported no significant age/cohort variation in the approach to an holistic Biblical interpretation, although they did find that older respondents possess harsher attitudes concerning the punishment of sin. An analysis of data from the 1989 General Social

Survey conducted by the National Opinion Research Center (Wood, 1990) reveals that among the 18-23 age group, 36 percent, among the 30-35 age group, only 23 percent, and for those 66 and older, 45 percent, report having a literal belief in the Bible.

Socioeconomic status There is some disagreement as to the nature of the relationship between Christian fundamentalism and level of education. In general, researchers have found that a negative relationship exists between level of education and Biblical literalism. As people become more educated, they are less likely to maintain a literal belief in the Bible (Burton, Johnson, & Tamney, 1989; Ellison & Sherkat, 1993a; Ethridge & Feagin, 1979; Grasmick, Davenport, Chamlin, & Bursik, 1992). This negative relationship does not hold, however, for adults who have converted to Christian fundamentalism. Burton, Johnson, and Tamney (1989) found that particular Christian fundamentalist beliefs, such as a literal belief in the Bible, are just as likely to be held by those with higher levels of education if they were not raised from childhood as Christian fundamentalists as to be held by those with low levels of education. They concluded that “being raised fundamentalist has more effect on one’s level of education than level of education has on whether or not one becomes a fundamentalist” (p. 11).

Belief in Biblical literalism varies by level of education. Gallup and Castelli (1989) reported that 45 percent of those surveyed with less than a high school education had a literalist view of the Bible, whereas only 11 percent of college graduates adhered to the same belief. There is evidence that Christian fundamentalists tend to be found among those at lower levels of income (Ellison & Sherkat, 1993a; Gallup, 1985).

Race Evidence exists that respondent's race should be controlled when examining Christian fundamentalism. In an analysis of evangelical Christian attitudes towards politics, Wilcox states that, "Blacks are more likely than whites to hold orthodox doctrinal views...to attend fundamentalists churches and to view religion as highly salient to their lives" (Wilcox, 1992, p. 11). On average, Black respondents usually score higher than White respondents on measures of Christian fundamentalism (De Jong & Ford, 1965; Wilcox, 1992). Ellison and Sherkat (1993a) found no racial differences when measuring for Biblical literalism, however; they found evidence that indicated Blacks held more punitive attitudes toward sinners than nonBlacks. Wood (1990) reported that a greater percentage of Blacks (59%) than Whites (29%) reported having a literal belief in the Bible.

Hispanic Americans also differ from the general population in their approach to the Bible. Although 31 percent of all Americans report being Biblical literalists, 40 percent of Hispanic Americans reported having a literal belief in the Bible. Hispanic Americans also are more likely than other Americans in general to pray on a daily basis, attend a Bible study, attend church services, and to return to going to church if they had stopped attending for a time (Gallup & Castelli, 1989).

Denomination Preference or membership in a particular denomination can influence the level of adherence to Christian fundamentalist beliefs. For example, respondents who indicate a preference for conservative Protestant denominations are more likely to adhere to a literal interpretation of the Bible than are liberal/moderate Protestants, Catholics, and those indicating no religious preference (Ellison & Sherkat, 1993a; Grasmick, Davenport, Chamlin,

& Bursik, 1992). When denominational preference is used as an indicator of particular religious beliefs, the extent to which respondents identify or adhere to specific theological beliefs of the preferred denomination is not known. Wilcox (1992) found that evangelicals attending an evangelical denominational church were more likely than nonevangelical attenders to be strongly attached to religious beliefs and institutions, attend church regularly, pray daily, watch religious television, listen to religious radio programming, and report that religion is important to their lives.

Region Fundamentalist Christians characteristically are found predominantly in the southern region of the United States (Gallup & Poling, 1980). Ellison and Sherkat (1993) reported that “native southerners are nearly twice as likely as others to embrace literal interpretation of the Bible” (p. 137). Christian fundamentalist beliefs are stronger among residents of smaller communities, compared to those living in larger, more urban settings (Ethridge & Feagin, 1979). Sometimes studies examining Christian fundamentalism tend to gather data exclusively from respondents residing in the South.

Authoritarianism and obedience Authoritarianism is characterized by its negative view of humanity (Adorno, Frenkel-Brunswik, Levinson, & Sanford, 1950). Fuller (1986) describes persons with what he refers to as an Authoritarian Conscience. They have internalized the view of some external authority and can no longer judge right and wrong for themselves. They also fear and admire the acknowledged authority, and submit totally to that authority without question. They believe that any violation, or sin, against the law of the authority requires a type of atonement. Others (Adorno, Frenkel-Brunswik, Levinson, &

Sanford, 1950; Cherry & Bryne, 1976) support this characterization. Authoritarian individuals adhere rigidly to a strict set of values and beliefs, show unwavering obedience to proponents of those beliefs, and are strong advocates of punitive punishment for anyone that violates those values and beliefs (Cherry & Bryne, 1976)

Religions vary in the level of authoritarianism they produce in their members. Adorno et al. (1950) found that, in families in which religion is salient, parents are more likely to manifest a rigid and autocratic style of parenting. They vary in the degree to which they require members to submit to “authentic” scriptures and the acknowledged person(s) of authority. They vary in the level of tolerance towards unbelievers and sin. They also differ in the degree to which they attempt to form members’ attitudes and beliefs (Altemeyer, 1981).

Frequency of church attendance varies among authoritarians and nonauthoritarians. Individuals with an authoritarian belief system are more likely than nonauthoritarians to go to church regularly (Cherry & Bryne, 1976).

Christian fundamentalist churches tend to be highly authoritarian, typically under the control of one leader (Ammerman, 1987; Barr, 1978; Marsden, 1983). Kurtz (1988) characterized Christian fundamentalists, regardless of religious preference, as keepers of a knowledge that is infallible, with a firm conviction that they are on the side of truth and righteousness and intolerant of any criticism of their beliefs. Christian fundamentalist parents insist that their children conform to suit their own partisan ideas and values (Ammerman, 1987; Boone, 1989; Dobson, 1970; Greven, 1990; Kurtz, 1988; LaHaye, 1977; Marsden,

1980). Christian fundamentalists tend to prefer less independence and greater compliance in children than do nonfundamentalist Christians (Ellison & Sherkat, 1993b; Smith, 1984).

The authoritarian style found in the church may be related to authoritarian parenting, characterized by parents' restrictions on the child's vocalization of his or her needs. Using a set of absolute standards, the parent attempts to mold and regulate the child's behavior and attitude. Family rules regarding the child's behavior are routinely announced in a matter-of-fact manner and usually not reached through any type of family discussion. Obedience and respect from the child are of the utmost importance to the parent. Authority is maintained by the parents by the suppression of any challenge coming from the child. Children in an authoritarian home environment are punished, usually physically, when they disobey any rules and/or restrictions (Baumrind, 1983; Maccoby & Martin, 1983).

### Corporal Punishment

Studies are reviewed regarding corporal punishment. Following are sections concerning measurement, prevalence, and factors associated with the use of and support for corporal punishment.

#### Measurement

Studies concerning corporal punishment tend to be concerned with the normative support for corporal punishment, measuring respondent's attitudes, and beliefs about, and support for, its use (Ellison & Sherkat, 1993a; Wiehe, 1990). Others have examined the reported use of corporal punishment by respondents (Duvall & Booth, 1979; Straus &



Donnelly, 1993). Although related, beliefs and behavior are conceptually different; the two are distinguished in this review.

According to Straus and Donnelly (1993), the most frequent forms of corporal punishment are, “spanking, grabbing or shoving ... roughly, and hitting with certain traditional objects, such as a hair brush, belt or paddle” (p. 420). However, Straus and Donnelly (1993) tend to exclude *hitting a child with an object* from their measure of corporal punishment, asserting that it would be classified better as a measure of child abuse.

### Prevalence

Almost all parents of young children in the United States use some form of corporal punishment (Straus, 1991). Citing the findings from the National Family Violence Surveys of 1975 and 1985, Straus (1991) reported that over 90 percent of the parents surveyed used physical punishment as a method of disciplining their children 3-4 years of age. Incidence rates have decreased since Sears, Maccoby, and Levin (1957) reported that 99 percent of the mothers in their study used physical punishment (Straus, 1991). There is evidence that many parents believe that “spanking children helps them to be better people when they grow up” (Moore & Straus, 1987). Parents who believe in the appropriateness and necessity of physical discipline are more likely actually to use it on their children (Dibble & Straus, 1990; Straus, 1991). Wood (1990) found that 78 percent of the respondents in a general population survey, sponsored by the National Opinion Research Center, reported agreement with the statement that “it is sometimes necessary to discipline a child with a good, hard spanking.”

### Factors associated with corporal punishment

Parent's sex In another study, Straus et al. (1980) found that mothers were more likely than fathers to have used physical punishment as a form of discipline. In a study utilizing data from 1976 (Straus et al., 1980), mothers were reported to use physical punishment more than fathers; however, ten years later, no differences were reported between mothers and fathers (Wauchope & Straus, 1990). Males show greater support than women for the incorporation of corporal punishment in private and public schools (Grasmick, Morgan, & Kennedy, 1992). Wood (1990) found that a greater percentage of males than females reported strong agreement with the idea that children sometimes need to be spanked as a form of discipline (males, 35%; females, 29%).

Parent's age There is conflicting evidence concerning the influence the age of the parent has on the approval and/or use of corporal punishment. The older the parent, the more likely he/she will show support for corporal punishment in a school setting (Grasmick, Morgan, & Kennedy, 1992), but the longer parents wait to have their first child, the less likely they are to use corporal punishment as a method of discipline (Mishkin, 1987). Wood (1990) found that strong agreement with the use of spanking as a form of discipline varied with the age of the respondent. Of the respondents in the 18-23 age group, 29 percent reported strong agreement with the statement that "it is sometimes necessary to discipline a child with a good, hard spanking." Of the respondents in the 54-59 age group, 42 percent reported strong agreement with the same statement.

Social class A review of the literature reveals that conclusions regarding the relationship between social class and corporal punishment are mixed. In a review of studies conducted from 1936 to 1964, Erlanger (1974) concluded that, although some of the studies had found a statistically significant relationship between social class and the use of corporal punishment, the relationship was relatively weak. From analysis of data collected by the National Commission on the Causes and Prevention of Violence, his conclusion, relative to the relationship between social class and the use of physical punishment, “is that there is indeed some correlation, but that it is probably not strong enough to be of great theoretical or practical significance” (Erlanger, 1974, p. 81).

In a study among Toronto families consisting of a husband and wife with at least one child between one and eighteen years of age living in the household, Duvall and Booth (1979) examined the relationship among social class, stress, and physical punishment. They operationalized their concept of social class with three variables: the parent’s level of education, the family’s adjusted annual income, and the occupational prestige of the husband. Controlling for the number of children in the family, the amount of time spent with the child at play, and the age of the child, they found no definitive relationships between social class and 1) parent’s approval of the use of physical punishment, 2) the reported use of physical punishment, 3) threats of physical punishment, and 4) the use of physical punishment in a hypothetical situation.

There were only three significant relationships between social class and physical punishment. Mothers with higher levels of education were more likely than mothers with

lower levels of education to report the use of physical punishment. Mothers with lower levels of income were more likely than mothers with higher levels of income to report approval for the use of physical punishment. Husbands with lower job status were more likely than husbands with higher job status to report the use of physical punishment and less likely to advocate its use in a hypothetical situation (Duvall & Booth, 1979).

In a study examining the prevalence of physical punishment among a sample of adolescent children, Straus and Donnelly (1993) found a curvilinear relationship between SES and physical punishment. They concluded that “the middle class may actually have higher prevalence rates of corporal punishment...than either the lower class or the upper-class” (p. 435). According to Straus and Donnelly (1993), when examining factors associated with corporal punishment, most researchers use a dichotomous measure of SES; however, in their study, the SES measure was constructed as a continuous variable (Straus & Donnelly, 1993).

Reports concerning the influence of education on the approval and/or use of physical punishment are mixed. In one study, mother's level of education had a weak but significantly positive relationship with reported use of physical punishment, accounting for only 2 percent of the variance (Duvall & Booth, 1979). Mothers with a higher level of education were slightly more likely than those with a low level of education to report using physical punishment. Other studies, however, support the notion that those with higher levels of education tend to use or advocate corporal punishment less than do those with lower levels of education. In a study of 330 adults surveyed in the Oklahoma City area, Grasmick, Morgan, and Kennedy (1992) concluded that

respondents with lower levels of education were more likely than parents with higher levels of education to indicate support for the use of corporal punishment in schools. Mishkin (1987) found that adults with an education level higher than the general public and who had been disciplined with physical punishment as children tended not to use corporal punishment on their own children. Mishkin suggested that parents with high levels of education are likely to be exposed to various methods of discipline, thereby having alternatives to corporal punishment available to them. Ellison and Sherkat (1993a) reported similar results, concluding that “education has strong direct and indirect effects that inhibit support for the physical punishment of children” (p. 138).

Level of caregiving The amount of time a parent spends with a child has been found to be associated with favorable attitudes, threats, and reported use of corporal punishment (Duvall & Booth, 1979). Duvall and Booth (1979) found that the more time mothers spend watching their children, the more likely they are to report having favorable attitudes toward the use of corporal punishment, as well as to report making threats of and using corporal punishment as a form of discipline. Mothers in their study reported spending twice as much time with their children, as compared to fathers.

Household size Household size has been found to have a positive relationship with the use of physical punishment. Past research has shown that, as family size increases, parents’ use of corporal punishment becomes more common (Nye, Carlson, & Garrett, 1970). Parents of larger families tend to be more punitive than parents of smaller families when disciplining their children (Wagner, Schubert, & Schubert, 1985) and are more rule-

oriented as well as likelier to adopt a more authoritarian parenting style (Bartow, 1961; Sears, Maccoby & Levin, 1957; Wagner, Schubert, & Schubert, 1985).

Child's sex Gender differences exist concerning the approval, threat, and use of corporal punishment. Boys typically are disciplined with corporal punishment more often than girls (Maccoby & Jacklin, 1974). Relying on adult recall data, Straus and Donnelly (1993) found that males reported higher rates of physical punishment as adolescents than females (58.2%, compared to 44%). In a separate study (Straus & Donnelly, 1993), daughters reported that, when they were disciplined with physical punishment, it was more likely administered by their mother rather than by their father (35.6%, compared to 26.7%).

Child's age The age of the child being punished has consistently been found to have an influence on the parent's use of physical punishment. Many parents believe that the use of physical punishment, such as spanking, is an acceptable form of discipline for young children but not for infants (Newson & Newson 1963, cited in Wauchope & Straus, 1990). Infants under the age of one year are the least likely to be punished physically, and children three to four years of age are among those most likely to receive physical punishment when disciplined by a parent (Wauchope & Straus, 1990).

Race Few studies have examined the influence of race on the approval and/or use of physical punishment among parents of young (1-6 years-old) children; studies that have examined race have reported mixed findings. In a sample of parents of twelve-year old children, Cazenave and Straus (1990) found that Blacks were no more likely than Whites to

approve of spanking or slapping their child. Blacks were, however, less likely to report having slapped or spanked a child within the past year. In another study, race was not found to be a factor in parents' support for corporal punishment in schools. The researchers acknowledged that Blacks were underrepresented in the sample, with 83.4 percent of the respondents identified as Whites (Grasmick, Morgan & Kennedy, 1992). In a more recent study, race was found to be a factor in the support of the use of physical punishment, with Blacks reported as being "particularly strong proponents of corporal punishment" (Ellison and Sherkat, 1993a). Wood (1990) reported that Blacks (47%) show stronger agreement than Whites (30%) with the idea that "it is sometimes necessary to discipline a child with a good, hard spanking" (p. 311).

Region There is evidence that suggests there are regional differences concerning the approval and/or use of corporal punishment. Persons living in the southern region of the United States tend to report more approval and/or use of physical punishment than do persons living in all other regions (Ellison & Sherkat, 1993). In an examination of the number of paddlings given to students within schools throughout the United States, Hyman (1990) found that "twelve southern states accounted for at least 80 percent" of the approximately one million cases reported (Hyman, 1990).

In a more recent study of regional differences in attitudes toward corporal punishment, Flynn (1994) reported that 86 percent of the southerners in the study support the use of corporal punishment, compared to 66 percent of those living in the northeast. Utilizing regression analysis, after controlling for various sociodemographic variables, rather than

finding the south/nonsouth dichotomy to be a reliable predictor of attitudes toward corporal punishment, the northeast was found to have significantly less favorable attitudes toward spanking than all other regions. Flynn states that “the only characteristic that predicted favorable attitudes toward corporal punishment among southerners was being a rural native” (p. 321). Furthermore, northeastern whites were found to have less favorable attitudes toward corporal punishment than any other group, regardless of region.

### Religiosity

In this section, literature is reviewed concerning the concept of religiosity. Measurement and definition issues are examined. The relationships among religiosity, Christian fundamentalism, and the use of corporal punishment are examined in this section.

Religiosity, operationalized as the degree of commitment to and involvement in one’s religious group, has been characterized as the “mechanism through which religious groups operate as points of reference” (Cochran & Beeghley, 1991, p. 48). Greeley (1963, as cited in Cochran & Beeghley, 1991) argued that attendance at religious services “allows group members to form primary groups” that provide “norms and role images” that serve to “unite members under a specific church doctrine” (p. 48).

The multidimensional nature of religiosity has been well documented (Cornwall & Albrecht, 1986; De Jong, Faulkner, & Warland, 1976; Stark & Glock, 1968; Hunt & King, 1978). Stark and Glock (1968) proposed that religion be conceptualized from a multidimensional perspective, and put forth five dimensions: experiential, ritualistic,



ideological, consequential, and intellectual. (Johnstone, 1983). The ritualistic dimension is the most familiar dimension, and is often operationalized in research as the frequency of the respondent's church attendance and/or prayer behavior.

Other researchers have focused on the multidimensional approach to religion (Faulkner & De Jong, 1966; King & Hunt, 1972). The factor-analytic studies of King and Hunt (1972) resulted in six primary measures of religiosity: 1) credal support, 2) devotionalism, or prayer life, 3) congregational involvement, such as church attendance and organizational activity, 4) religious knowledge, 5) orientation to religion, and 6) religious salience, the importance religion plays in the day-to-day life of the respondent.

Although research consistently supports the multidimensional nature of religion, occasionally religiosity is operationalized using a single-item indicator, usually measured as the frequency of the respondent's church attendance (Shehan, Bock, & Lee, 1990; Willits & Crider, 1989). Multiple indicators of religiosity, however, have become the norm, and have been used in studies concerning marital adjustment (Filsinger & Wilcox, 1984), religious homogamy and marital happiness (Heaton & Pratt, 1990), and the research by Newman and Pargaments (1990) on the role religion plays in the problem-solving process.

Wimberley (1989) proposed that researchers conceptualize religiosity from a structural symbolic interactionist viewpoint. He proposed two components of religiosity: 1) religious norm adherence, defined as "the degree to which an individual adheres to the normative expectations of his or her religious group" (p. 130), and 2) religious identity salience, defined as the "extent to which the religious identity is dominant among other

identities that make up the self' (p. 130). Wimberley proposed operationalizing religious identity salience by having respondents rank its importance compared to other specific role-identities. According to Wimberley, religious norm adherence could be measured using the criteria originally put forth by Stark and Glock (1968).

For the purposes of this study, religiosity is defined as the degree of commitment and involvement in one's religious group.

#### Christian Fundamentalism, Religiosity, Obedience, and Corporal Punishment

The Bible contains passages that indicate support for the sentiment that parents are to expect obedience from their children and that all disobedience should be reprov'd, at times with the use of physical punishment. Children are admonished to honor and obey parental authority (Ephesians 6:2; Exodus 20:12; Colossians 3:20; I Timothy 3:4-5). Parents are exhorted to use physical punishment to influence the character of their children (2 Samuel 7:14; Proverbs 13:24, 19:18, 22:15, 23:13, 29:15; Hebrews 12:5-11; Ellison & Sherkat, 1993a) and are warned of the consequences if they vary in any way from this childrearing precept (Deuteronomy 6:6-7; Proverbs 22:6; Ephesians 6:4). Ellison and Sherkat (1993b) have found evidence, among conservative Christians, of strong support for valuing obedience in children.

Popular conservative Christian writers concerning childrearing practices are strong advocates for the appropriateness of physical punishment as a form of discipline (Christenson, 1970; Dobson, 1970, 1976; Ellison & Sherkat, 1993a; Evans, 1991; Meier, 1977). They base

their approach to discipline on a literal interpretation of the Bible regarding all scripture as “God-breathed and useful for teaching, rebuking, correcting and training in righteousness” (2 Timothy 3:16). Christenson (1970) argues that physical punishment with an object or “rod” is biblically ordained (Proverbs 13:24, 29:15), and that “parents will never have a clear-cut approach to the discipline of their children until they accept the rod as God’s appointed means of discipline” (p. 112).

Dobson (1976) asserts that physical punishments, such as spanking, should not be used on children under 18 months of age. According to Dobson, a child should receive his or her first spanking at the first occurrence of purposeful disobedience. Most spankings should occur between the ages of two and five years old, and a child should receive his or her last spanking by the time he or she reaches the age of 9 (Dobson, 1976). Dobson (1970, 1976) and others (Christenson, 1970; Meir, 1977) advocate the use of spanking sparingly and using it only for those times of outright disobedience by the child. Christenson asserts that parents should have an intended purpose when they spank, stating that the objective should be “to cause the child enough pain to rouse wholesome fear” (Christenson, 1970, p. 116).

Historical evidence exists linking adherence to Christian fundamentalist beliefs with the support for the use of corporal punishment dating back to the 17th century (Greven, 1977, 1990). Christian fundamentalists are strong supporters for the use of corporal punishment in institutions of public and private education (Grasmick, Morgan, & Kennedy, 1992; Ham, 1982). In a recent study, significant normative support for corporal punishment was found among Christian fundamentalists (Ellison & Sherkat, 1993a). Ellison and Sherkat (1993a)

found that conservative Protestants' support for corporal punishment is influenced by an adherence to a literal interpretation of the Bible, in three distinct ways. First, literalists believe that all people are born with a sinful nature and have an inborn inclination to sin or be disobedient. Second, literalists believe in the need for atonement for sin or acts of disobedience. Third, the Bible contains specific verses pertaining to the salience of the parental role in regards to discipline (p. 141).

Christian fundamentalists also have been found to sanction or approve retribution as a punishment philosophy. Grasmick, Davenport, Chamlin, and Bursik (1992) found that Christians who were affiliated with a fundamentalist denomination were more likely than all other respondents in the study to support the concept of retribution for crimes committed against society. They also reported that a contributing factor to this support was a literal belief in the Bible.

Evidence is mixed indicating any direct relationship between personal religiosity, defined as the degree of commitment to a particular faith, and corporal punishment. Grasmick, Morgan, and Kennedy (1992), however, found a significant positive relationship when defining religiosity as the degree of importance religion plays in the daily life of the individual. They reported that a greater degree of importance for religion was correlated with stronger support for the use of corporal punishment and that this support was influenced by the individual's denominational preference. Support for corporal punishment was greater among those reporting a preference for a theologically conservative denomination.

Although little evidence exists demonstrating a direct link between one's personal religiosity and his or her use of corporal punishment, measures of personal religiosity have been used by various researchers as predictors of outcome variables related to individual attitudes, beliefs, and behaviors. In one study, Bock, Cochran, and Beeghley (1987) reported a negative relationship between personal religiosity and the use of alcohol among a group of adults. In their study, adults who were frequent church attenders were significantly less likely than infrequent attenders to consume alcohol.

In another study (Bock, Beeghley, & Mixon, 1983), researchers reported that, among those respondents indicating a preference for a conservative denomination, religious group involvement was positively and significantly related to conservative sexual attitudes. In other words, those respondents who reported frequent involvement in church groups were more likely than those infrequently involved to have conservative attitudes toward sex. Cochran and Beeghley (1991) reported similar results. They found that "the effects of religiosity on nonmarital sexuality vary by religious affiliation" (p. 45).

In another study, Jelen (1984) found that, among those respondents opposed to abortion, frequent church attenders showed opposition to abortion based on "the right to life" issue. Infrequent attenders showed opposition to abortion based on the belief that it leads to sexual promiscuity.

In summary, research has demonstrated that a relationship exists between personal religiosity and support for the use of corporal punishment. Conservative denominations are more proscriptive with regard to their expectations for parental behavior (Ellison & Sherkat,

1993b). Studies also have demonstrated the utility of using personal religiosity as a predictor of various individual beliefs, attitudes, and behavior.

The concept of obedience permeates Christian fundamentalist doctrine and teachings. Passages found in the Bible clearly indicate that obedience to authority is to be valued. If corporal punishment is to be administered only in response to disobedient behavior (Dobson, 1970), then it would seem reasonable to assume that, if a relationship exists between adherence to Christian fundamentalist values and reported use of corporal punishment, the parent's view of the importance of obedience will be a mediating factor.

## SYMBOLIC INTERACTION

Symbolic interaction, with its emphasis on socialization and interaction, seems to be an appropriate theoretical framework for this research. This chapter consists of two sections. First, a general overview of symbolic interaction theory is given. In the second section, symbolic interaction is applied to the relationship between Christian fundamentalism and the use of corporal punishment.

### Symbolic Interaction

The basic premise suggested by the symbolic interaction theoretical framework is that people “interpret each other’s actions as the means of acting toward one another” (Blumer, 1972, p. 10). Interpretation of actions takes place through the use of symbols and gestures and the shared meanings attached to them. As a result, certain expectations of behavior develop. Therefore, people respond not only to the immediate actions of others but also to the interpretive meaning of those actions and the perceived expectations of others or how they think others believe they should behave. These clusters of expectations are known as roles (Stryker, 1980; Wimberley, 1989).

According to Stryker (1980), people tend to interact mainly with “the same cast of others” (p. 68), that is, people who share commonalities. Stryker also asserts that most interactions take place within boundaries of groups. Groups are defined as “aspects of social life that are tied together in patterned interaction” (p. 68). Group members occupy roles

within the group and these roles have group-specific norms and expectations of behavior attached to them. Family is a basic group, as are religious entities.

Some basic concepts of symbolic interaction are: positions, roles, identity, identity salience, significant-other, and reference group. Positions are labels that represent the various kinds of persons one can be in a given society (rich man, poor man, teacher). Expectations about the behavior of persons in positions are expressed or referred to as roles (Stryker, 1980, p. 57). Roles are the “shared behavioral expectations that are attributed to various stations or positions” (Gaddis, 1994, p. 20) and have been characterized as “clusters of expectations for appropriate behavior” (Wimberley, 1989, p. 129). Expectations can be normatively defined and may pertain to all or only some interactions (Stryker, 1980).

Identities have been defined by Stryker (1980) as “internalized positional designations” that exist as the “person interacts in structured role relationships” (p. 60). For example, a man can have the identities of husband, conservative Christian, and father. It is the various identities that comprise the self. Rosenberg (1972) defined social identities as “groups, status’ or categories” to which an individual is “socially recognized as belonging” (p. 10).

The concept of identity salience is the ordering of identities into a “salience hierarchy, such that the higher the identity the more likely that identity will be invoked in a given situation or in many situations” (Stryker, 1980, p. 60). Identities at higher levels of importance become predictors of behaviors. The higher the salience of an identity, “the more likely is one’s role performance to be consistent with the role linked to that identity” (Stryker, 1980, p. 61).



An important aspect of identity salience is the relationship between salience and commitment. Stryker (1968, 1980) asserts that “to the degree that one’s relationships to specified sets of other persons depend on being a particular kind of person, one is committed to being that kind of person” (Stryker, 1980, p. 61).

According to Sullivan (1940, as cited in Denzin, 1972), the phrase “significant other” refers to any individual who is held in high esteem. Kuhn (1972) differentiated between role-specific significant others, those who tend to be situationally established, and orientational others, those with whom the individual “tends to have a history of relationships” (Denzin, p. 186). Kuhn’s orientational other is characterized by:

1. others to whom the individual is most fully, broadly, and basically committed, emotionally and psychologically;
2. others who have provided him (her) with his (her) general vocabulary, including his (her) most basic and crucial concepts and categories;
3. others who have provided and continue to provide ... categories of self and other, and with the meaningful roles to which such assignments refer;
4. others in communication with whom his (her) self-conception is basically sustained or changed (Kuhn, 1972, p. 182).

Denzin (1972) operationalized *role-specific* significant others by asking college students to list “those persons or groups of people whose evaluation as a student ... concern you the most” and *orientational* others as “those whose evaluation of you as a person concern you the most” (p. 187). For the purposes of this study, the term “significant other” will refer to both the role-specific other and orientational other dimensions.

Another important concept of symbolic interaction is the reference group. According to Kuhn (1972), the social group is of foremost importance to symbolic interaction theory because “it provides both the language through which interaction takes place and the mutual others with whom interaction occurs” (p. 178). Symbolic interaction theory asserts that people’s identities, attitudes, and behavior are shaped by the group norms. Bock, Beeghley, and Mixon (1983) offer specific criteria that determine the viability of a group as a reference group.

The degree to which a group or collectively serves as a reference point for an individual is a positive and additive function of:

1. the degree of similarity between the status attributes of an individual and other members,
2. the degree to which an individual’s values and beliefs agree with those of other members,
3. the degree of clarity in a group’s values and beliefs,
4. the degree to which an individual is in sustained interaction with other group members, and
5. the degree to which an individual defines group leaders as significant others. (p. 548)

Religious groups appear to meet the above criteria. Members of religious groups tend to share the same social status (Bock, Beeghley, & Mixon, 1983). Membership in a religious group is often dependent upon public adherence to that group’s doctrinal beliefs, such as a “confession of faith” (Ammerman, 1987), the completion of a type of “confirmation class” (Johnstone, 1983), or public baptism (Ammerman, 1987; Dollar, 1973). The doctrinal beliefs

of religious groups are made public through the use of sermons and educational literature often published by group-specific publishing houses (Ammerman, 1987; Marsden, 1980). The sustained interaction of religious group members is met through regular attendance at religious services and various church events (Ammerman, 1987; Boone, 1989).

Acknowledged leaders in religious groups often take on the role of significant other to group members. Pastors often serve in the role as individual or family counselor for the group (Bock, Beeghley & Mixon, 1983; Ammerman, 1987). Ammerman (1987) reported that she was able to conduct an ethnographic study, which included members of a Baptist church, only after the pastor reassured the congregation that she had his approval. Alwin (1986) asserts that parental behavior can be influenced by the attitudes and beliefs of the members from the family's place of worship.

### Christian Fundamentalism and Symbolic Interaction

From a symbolic interaction perspective, the more salient a person's religious identity, the more likely he or she will be to conform to the norms and expectations of his or her religious reference group. Christian fundamentalists tend to be very distinctive in their religious values and religious routine, especially in regard to parenting (Hunter, 1983; Smith, 1984; Thorton, 1985). Parental authority, from a Christian fundamentalist perspective, is regarded as being derived from God's authority. In the role of parent, Christian fundamentalists are held accountable for the development and behavior of their children. Children are expected to be obedient and direct disobedience is to be punished, often

physically. Among Christian fundamentalist groups, religious behavior and parenting are highly regarded. Interaction between the individual and the group takes place in many settings, such as worship services, Bible studies, and various social gatherings, where group-specific norms and expectations of behavior are shared and reinforced. Of interest to this study is the influence the group has on the beliefs and behavior of the individual with regard to parenting. Bearing in mind that Christian fundamentalist doctrine asserts that obedience is to be expected from children and that the use of corporal punishment is a valid and preferred method of discipline for disobedience, it is expected that individuals interacting with this group will manifest values and behavior consistent with those of the group in disciplining their children.

## HYPOTHESES

Based on the review of the research and the theoretical literature about Christian fundamentalism, religiosity, obedience, and the use of corporal punishment, the following hypotheses are advanced:

- H1: Reported use of corporal punishment is a function of adherence to Christian fundamentalist beliefs.
- H2: The relationship between adherence to Christian fundamentalist beliefs and reported use of corporal punishment is not spurious when controlling for the following variables: respondent's sex, respondent's age, level of education, level caregiving, household income, household size, child's sex, child's age, race, religious denominational preference, and region of residence.

Two factors, religiosity and obedience, emerged from the review of literature as variables that potentially could intervene between the independent variable and the dependent variable. Therefore two additional, alternative hypotheses are postulated:

- H3(a): Religiosity is an intervening variable between the relationship of adherence to Christian fundamentalist beliefs and reported use of corporal punishment.
- H3(b): Parent's view of the importance of obedience is an intervening variable between the relationship of adherence to Christian fundamentalist beliefs and reported use of corporal punishment.

## METHODS

The methods used to test the hypotheses are included in this section. The data set is described first, followed by a description of the subsample analyzed. Then the variables are defined, including methods used to handle missing data. Finally, the elaboration model and statistical methods used to test the model are described.

### The Data

The data analyzed for this study are from the National Survey of Families and Households (Sweet, Bumpass, & Call, 1988) gathered between March 1987 and May 1988. Face-to-face interviews were conducted with a national probability sample of 13,017 respondents. Several population groups were double-sampled: minority groups, single-parents, persons with step children, cohabiting persons, and persons who were recently married. One adult per household was selected randomly to be the primary respondent. Although most data were gathered through the administration of an interview schedule, portions of the main interview were self-administered. The spouse or cohabiting partner of the primary respondent was asked to complete a self-administered questionnaire that was shorter in length than the main questionnaire. Only data from the primary respondent are used in this study.

For the study, a subsample of primary respondents was selected. Included were individuals who were currently married, and who had at least one child over 12 months of age and under 5 years of age. In addition, respondents were limited to those who had no

children 5 years old and older living in the household, and the “focal child,” the child on whom the respondent was asked to focus on when answering specific questions about child-rearing, discipline, and parental behavior, was the biological child of the respondent. The focal child was selected by listing the first names of each of the children living in the household who met a particular set of criteria (for this study, children at least 1 year of age and under the age of 5). Then the interviewer designated the child whose first name came first alphabetically on the list as the focal child (Sweet, Bumpass, & Call, 1988).

The decision to limit respondents to those currently married resulted from research on the effects of single parenthood on discipline. Hetherington, Stanley-Hagan, and Anderson (1989), for example, assert that “during and following divorce ... the discipline of custodial mothers often becomes erratic, inconsistent, peremptory, and punitive” (p. 306). They also note that these mothers tend to be less effective monitors of their children’s behavior. To eliminate such influences, the final sample included respondents in married couple households.

A total of 620 respondents met the criteria. The sample was reduced to 546 through the elimination of 7 cases for which sex of the focal child was not known, and 67 cases with missing data on at least one of the several variables used to assess Christian fundamentalism, religiosity, and denominational preference.

## The Variables

### Dependent variables

There are two separate measures of reported use of corporal punishment. First, a measure of the *usual use of corporal punishment* is the respondent's answer to the question: "Listed below are several ways that parents behave with their children. Please indicate how often you do each?: (b) Spank or slap child." The response format ranged from (1) *never* to (4) *very often*. Values ranged from 1 to 4, with a mean of 2.4 and a standard deviation of .78 (Table 1). A second measure of reported use of corporal punishment, the *recent use of corporal punishment*, is the response to the question: "About how many times have you had to spank (focal child) in the past week?" Responses ranged from 0 to 20 times. The distribution of responses on the question was highly skewed: 281 respondents (51.5%) reported never spanking the child during the previous week, 113 respondents (20.7%) reported spanking the child once, 68 (12.5%) reported spanking twice, and 84 (15.4%) reported spanking three or more times. The variable was recoded to form a categorical variable with a range of 0 (not spanked) to 3 (spanked three or more times), with a mean of 1.08 and a standard deviation of 1.19 (Table 1).

It should be noted that, although it might have been preferable to have multiple-indicators of the dependent variable (for example father's report, child's report), the use of corporal punishment was measured with two separate single-item indicators. In addition, each single-item indicator measures differing aspects of the respondent's reported use of corporal punishment. The variable, usual use of corporal punishment, is a measure of how



Table 1: Means and standard deviations or proportions for all variables.

Variables	Mean	St. dev.	Range
Fundamentalism	9.07	2.98	3 - 15
Usual use of corporal punishment	1.65	0.77	0 - 3
Recent use of corporal punishment	2.08	1.12	0 - 3
Respondent's age	28.90	5.69	16 - 59
Respondent's education	13.46	2.43	6 - 20
Household income	\$36,511.00	\$25,820.00	\$100 - \$155,051
Household size	3.46	0.72	3 - 9
Child's age	2.21	1.06	1 - 4
Level of caregiving	4.32	3.97	0 - 20
Importance of obedience	11.05	2.15	2 - 14
Religiosity	6.49	3.23	3 - 15
<hr/>			
Proportion of male respondents	.43		
Proportion of male children	.49		
Proportion White	.86		
Proportion of conservative Protestants	.33		
Proportion Northeast	.19		
Proportion Northcentral	.29		
Proportion South	.33		
Proportion West	.19		

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n = 546

the respondent generally disciplines all of his or her children. The variable, recent use of corporal punishment, is a measure of the actual number of times the respondent reported using corporal punishment during a specific frame of time with the designated focal child. In more than half of the households (61%) in the sample, the focal child is an “only child” so, for both measures, the respondent is really reporting behavior directed to one individual. Other households (35%) have only two children. The age difference between the focal child and the other child in the household could be as much as three years, however. Therefore, it is not safe to assume that the children are necessarily disciplined in the same manner.

#### Independent variable

A variable measuring the respondent’s adherence to Christian fundamentalist beliefs was constructed using three separate items. Respondents were asked to respond to three statements using a 5-point Likert scale ranging from (1) strongly agree to (5) strongly disagree. Responses were reverse-coded, to create a rising scale of adherence to Christian fundamentalism. The statements included: 1) “The Bible is God's word and everything happened or will happen exactly as it says,” 2) “The Bible is the answer to all important human problems,” and 3) “I regard myself as a religious fundamentalist.” Responses to each statement were then summed to form a scale of adherence to Christian fundamentalism, yielding values that range from 3 to 15, with a mean of 9.07 and a standard deviation of 2.97 (Table 1). Reliability analysis produced a value for Cronbach’s alpha coefficient of .83, indicating a reliable scale measuring a single underlying concept.

### Intervening variables

The respondent's religiosity was measured using three separate items concerning the respondent's involvement with his or her religion. Respondents were asked to respond to the following questions:

1) "About how often do you do the following things: Attend a social event at your church or synagogue?" The response format ranged from (0) never to (4) several times a week. Responses were recoded to reflect a range of 1 to 5, a range consistent with the other two items in the scale.

2) "Here is a list of various kinds of organizations. How often, if at all, do you participate in each type of organization? Religious." The response format for this question ranged from (1) never to (5) several times a week.

3) "How often do you attend religious services?" Responses ranged from (1) never to (5) several times a week.

Responses from each item were then summed creating a scale measuring the respondent's religious involvement, with values ranging from 3 to 15, a mean of 6.7 and a standard deviation of 3.1. Reliability analysis produced an alpha coefficient of .86.

The respondent's view of the importance of obedience was constructed by summing the responses to two separate questions concerning obedience. Parents were asked to indicate their views concerning how important it is for their children always to follow family rules and how important it is for their children always to do what is asked (1 = not at all important, 7 = extremely important). Responses from the two questions were correlated at

.55. Summing resulted in scores ranging from 2 to 14, with a mean of 11.05 and a standard deviation of 2.15 (Table 1).

#### Control variables

Respondent's sex Males were coded 1 and females were coded 0. Of the 546 respondents in the subsample, 57 percent are female (Table 1).

Respondent's age The variable, respondent's age, is a continuous variable reflecting the reported age, in years, of the respondent. Ages for the respondents in the sample range from 16 to 59 years, with a mean of 28.9 and a standard deviation of 5.69 (Table 1).

Respondent's education The respondent's level of education was measured using a single-item indicator based on the respondent's report of number of completed years of formal education. Values range from 6 to 20, with a mean of 13.46 and a standard deviation of 2.43 (Table 1).

Level of caregiving This variable measures the number of hours per day respondents reported normally taking care of the focal child's physical needs, such as feeding, bathing, dressing, and putting to bed. Responses range from 0 to 20 hours, with a mean of 4.32 and a standard deviation of 3.97 (Table 1).

Household income The income variable is the yearly household income, which, as reported by the respondent, includes the total income of the respondent and spouse from interest, dividends, and other investments. Income data were not collected from respondents who were not heads of the households; in addition, some did not answer the income question. Therefore, there were 50 cases in which no data were available on household income.

Missing income was estimated using a regression equation that included a measure of the respondent's reported ownership of specific items. Respondents were asked to indicate, 1 (no) and 2 (yes), as to whether or not they owned a car, a house, a farm or business, or a boat. Responses were summed resulting in scores that ranged from 4 to 8, with a mean of 5.8 and standard deviation of .78. The regression equation used was:

$$\text{Missing income} = \text{Intercept} + b_1 (\text{assets}).$$

From the values of  $R^2$  (.15) and the F-ratio (86.47,  $p < .0001$ ), it is evident that income estimates derived from the presence of assets is superior to simply substituting the mean. The resulting annual income variable ranged from \$100 to \$665,100, with a mean of \$37,989.50 and standard deviation of \$39,020.45. Eight reported income values were higher than three standard deviations above the mean. Those eight values, none of which was among those estimated, were then recoded to the value representative of three standard deviations above the mean (\$155,051), resulting in a new mean of \$36,511 and a standard deviation of \$25,820, with a range from \$100 to \$155,051 (Table 1).

Household size Household size, is the total number of people living in the household at the time of the interview. Household size ranges from 3 to 9 with a mean of 3.49 and a standard deviation of .71 (Table 1).

Child's sex The sex of the focal child was coded as female 0, and male 1. Of the 546 children in the sample, 49 percent are male (Table 1).

Child's age Ages for the children in the sample range from 1 to 4 years of age, with a mean of 2.21 and a standard deviation of 1.06 (Table 1). Of the 546 children in the study,

171 (31.3%) are one year old, 178 (32.6%) two years old, 108 (19.8%) three years old, and 89 (16.3%) four years old.

Race Race was dummy-coded as White, 1, and nonWhite, 0. Of the 546 respondents in the sample, 86 percent are White (Table 1). Groups coded as nonWhite include Black, Mexican-American, Puerto Rican, Cuban, Native American, Asian, and other Hispanic.

Denomination Respondents were asked to report their religious preference at the time of the interview. Initial responses were Catholic, Jewish, Protestant, or no preference. If Protestant was indicated, the respondent was then asked to name a specific denomination, if any, that was preferred. Using the coding scheme suggested by Smith (1990), the respondent's preference was recoded to create a dummy variable of conservative Protestants, coded 1, and all others in the study, coded 0. Conservative Protestant include all Baptists, Protestants with no denominational preference, Assemblies of God, Christian Missionary Alliance, Christian Church, Church of God, Pentecostals, and Church of the Nazarene. Of the 546 respondents, 33 percent are coded as conservative Protestant (Table 1).

Region The respondent's residence at the time of the interview was coded to indicate one of four regions in the United States designated by the U.S. Bureau of the Census. Of the 546 respondents in the sample, 19 percent reside in the northeast, 29 percent in the midwest, 33 percent in the south, and 19 percent in the west (Table 1). Dummy coding was used to form four separate variables. The omitted region in the regression analyses was south.

## The Analysis

The hypotheses to be tested are hypotheses that are inherent in an elaboration model. General aspects of an elaboration model are presented first, followed by a description of the techniques used to test such models.

### The Elaboration Model

Elaboration, or third-variable analysis, is a method of increasing the understanding of the relationship between two variables (Rosenberg, 1968, p. 24). A third variable, known as a test factor, is held constant and the original relationship is examined. Comparing the relationship between the independent and dependent variables *with* the test factor to the relationship *without* the test factor permits the researcher to safeguard against misleading interpretations of the initial relationship and to explain the initial relationship. In this study, the original relationship is the relationship between the independent variable, Christian fundamentalism, and the dependent variable, the use of corporal punishment. Because there are two measures of the dependent variable, parallel analyses are performed for two models.

One of the most important objectives of elaboration is to ascertain whether the original relationship is spurious, only occurring because the independent and dependent variables are related through a mutual relationship with a third variable or variables. Rosenberg (1968) suggests controlling for, or holding constant, a test factor. The test factor must be viewed as antecedent to both the independent and dependent variables (Babbie, 1992). Rosenberg (1968) asserts that "If, when the influence of the extraneous test factor is held constant, one finds that the relationship disappears, then it may be concluded that the relationship is due to

the extraneous variable” (p. 32-33). Rosenberg describes this type of relationship as “spurious.” If the original relationship remains virtually unchanged, then the original relationship is considered replicated under test conditions (Babbie, 1992). In this analysis, there is not a single test factor; rather, the set of socioeconomic and demographic variables are treated as a single block and are all entered into the equation at the same time.

A second form of elaboration is testing for the presence of an intervening variable. In the theoretical formulation, the independent variable is viewed as antecedent to the intervening variable which, in turn, is antecedent to the dependent variable. An intervening variable helps to interpret the mechanism through which the relationship between the independent and dependent variable occurs (Babbie, 1992, p. 421). According to Rosenberg (1968), to designate a variables as intervening “requires the presence of *three asymmetrical relationships*: (1) the original relationship between the independent and dependent variables ... (2) a relationship between the independent variable and the test factor ... and (3) a relationship between the test factor and the dependent variable” (p. 57).

For the purposes of this study, the respondent’s view of the importance of obedience and respondent’s religiosity are tested separately as intervening variables for the relationship between the independent variable, adherence to Christian fundamentalist beliefs, and the dependent variable, reported use of corporal punishment. If the relationship of adherence to Christian fundamentalism and the use of corporal punishment is due to the importance of obedience or religiosity, then, when the test factor is controlled, the relationship should vanish or be reduced substantially.



### Testing the Elaboration Model

Preliminary analyses were done using the SPSS statistical software package. Included in the preliminary analyses were frequency distributions, crosstabulations, correlations, and the calculation of reliability coefficients. Preliminary two-variable analyses were also used to ascertain whether the preconditions necessary for introducing the test factors were met. Then the hypotheses were tested using hierarchical regressions. Because the dependent variables are both categorical variables with multiple responses, logistic regression techniques, rather than ordinary least-squares regressions, were used to test the hypotheses. The hypotheses were tested using ordinal logistic regression with the aid of the SAS statistical software package.

Preliminary analyses Prior to the introduction of the test factors specified by the theoretical model, it must be ascertained that the test factors are related empirically to the independent and dependent variables. Pearson product-moment correlations were used (even though the variables are not normally distributed) for this purpose, with the two dependent variables treated as continuous interval variables. The correlations were examined to ascertain if the relationships among the control variables, the independent variable, the dependent variables, and the variables hypothesized to intervene, were significant at the .05 level. All of the relationships among the independent, dependent, and intervening variables, were significant except that between religiosity and the recent use of corporal punishment. Therefore, religiosity was not introduced into the model for recent use of corporal punishment.

Hierarchical regressions The hierarchical regressions were performed in three steps. First, the relationship between the adherence to Christian fundamentalism and the two

dependent variables measuring use of corporal punishment were examined in separate logistic regression equations to ascertain if adherence to Christian fundamentalism was a predictor of the reported use of corporal punishment. Then, the initial relationship between the independent and dependent variables was tested for spuriousness by including the sociodemographic controls or test variables in each model. The original relationship was said to be spurious if, when the socioeconomic and demographic variables were controlled, the strength of the relationship decreased so that it was no longer significant. Finally, each of the variables hypothesized to intervene was introduced into each model one at a time. Respondent's view of the importance of obedience, was introduced first. The same test was done using respondent's religiosity, including it only in the equation with usual use of corporal punishment. The variable was said to intervene if, when the intervening variable was entered into the equation, the strength of the original relationship decreased so that it no longer was significant.

## FINDINGS AND INTERPRETATIONS

Results of the analyses are presented in this section. An examination and description of the zero-order correlation matrix (Table 2) is presented. Then the results of the logistic regressions used to test the elaboration model are presented. Results are discussed and interpretations offered.

### Pearson Product-Moment Correlations

Examination of the zero-order correlation matrix (Table 2) shows that adherence to Christian fundamentalism is related positively and significantly to respondent's religiosity, respondent's view of the importance of obedience, and respondent's reported usual and recent use of corporal punishment.

Higher levels of adherence to Christian fundamentalism are associated with higher levels of reported recent and usual use of corporal punishment. Higher levels of adherence to Christian fundamentalism are also associated with higher levels of importance with regard to obedience and higher levels of attendance or involvement with one's religious group. Socioeconomic and demographic variables associated significantly with adherence to Christian fundamentalism indicate that higher levels of this measure are characteristic of younger respondents, those with lower levels of education and household income, those respondents referred to as nonWhite, Conservative Protestants and those residing in the south

The two corporal punishment measures are related significantly and negatively to

Table 2: Correlation coefficients between all pairs of variables.

	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
1. Fundamentalism		.29 <sup>b</sup>	.15 <sup>b</sup>	-.06	-.22 <sup>b</sup>	-.27 <sup>b</sup>	.06	-.21 <sup>b</sup>	.08	.03	.04	-.14 <sup>b</sup>	.39 <sup>b</sup>	-.14 <sup>b</sup>	-.02	.16 <sup>b</sup>	-.02	.34 <sup>b</sup>	.49 <sup>b</sup>
2. Usual corporal punishment		.48 <sup>b</sup>	-.08	-.29 <sup>b</sup>	-.22 <sup>b</sup>	.04	-.17 <sup>b</sup>	.17 <sup>b</sup>	.07	.09 <sup>a</sup>	-.01	.15 <sup>b</sup>	-.07	.01	.03	.02	.23 <sup>b</sup>	.11 <sup>b</sup>	
3. Recent corporal punishment		-.17 <sup>b</sup>	-.17 <sup>b</sup>	-.26 <sup>b</sup>	-.21 <sup>b</sup>	.18 <sup>b</sup>	-.16 <sup>b</sup>	.00	.06	-.03	.05	.07	.00	.00	.00	.01	.10 <sup>a</sup>	-.03	
4. Respondent's sex		.28 <sup>b</sup>	.04	-.38 <sup>b</sup>	-.04	-.38 <sup>b</sup>	-.04	.02	.03	.04	-.07	-.07	-.03	-.03	.05	-.00	.09 <sup>a</sup>	-.04	
5. Respondent's age		.44 <sup>b</sup>	-.17 <sup>b</sup>	.34 <sup>b</sup>	.04	.06	.08	.06	.08	.08	.06	-.19 <sup>b</sup>	.10 <sup>a</sup>	-.09 <sup>a</sup>	.01	-.00	-.13 <sup>b</sup>	.01	
6. Respondent's education		-.09 <sup>a</sup>	.38 <sup>b</sup>	-.09 <sup>a</sup>	-.09 <sup>a</sup>	-.09 <sup>a</sup>	-.01	.09 <sup>a</sup>	.03	.03	.11 <sup>b</sup>	-.17 <sup>b</sup>	.08	-.02	.01	-.06	-.18 <sup>b</sup>	.17 <sup>b</sup>	
7. Level of caregiving		-.04	-.09 <sup>a</sup>	-.04	-.09 <sup>a</sup>	-.07	-.13 <sup>b</sup>	-.07	-.13 <sup>b</sup>	-.07	.03	.00	.00	-.01	.04	-.04	.03	.02	
8. Household income		-.03	.07	-.01	.10 <sup>a</sup>	-.12 <sup>b</sup>	.15 <sup>b</sup>	-.08	-.02	.02	.02	.00	-.02	.02	-.04	.05	.03	.03	
9. Household size		-.02	.05	.01	-.02	-.07	.08	-.02	-.07	.08	.08	.01	-.02	-.07	.08	-.00	-.03	.05	
10. Child's sex		-.00	.01	-.04	-.03	.08	-.02	.06	.08	.08	.08	.01	-.04	-.03	.08	-.02	.06	.00	
11. Child's age		.07	-.04	.12 <sup>b</sup>	-.14 <sup>b</sup>	-.01	-.13 <sup>b</sup>	-.05	.07	.07	.07	.07	-.04	.12 <sup>b</sup>	-.14 <sup>b</sup>	-.01	-.13 <sup>b</sup>	-.05	
12. White		-.14 <sup>b</sup>	-.05	.25 <sup>b</sup>	-.09 <sup>a</sup>	.22 <sup>b</sup>	-.31 <sup>b</sup>	-.35 <sup>b</sup>	-.24 <sup>b</sup>	-.05	-.08	-.45 <sup>b</sup>	-.30 <sup>b</sup>	-.06	.03	-.34 <sup>b</sup>	.13 <sup>b</sup>	.08	
13. Conservative Protestant																			
14. Northeast																			
15. Northcentral																			
16. South																			
17. West																			
18. Obedience																			
19. Religiosity																			

<sup>a</sup> significant at the .05 level<sup>b</sup> significant at the .01 level

respondent's age, education, and household income. They are both related significantly and positively to the respondent's view of obedience. Usual use of corporal punishment is significantly and positively correlated with household size, being a conservative Protestant, and respondent's religiosity. Recent use of corporal punishment is related significantly and positively to the level of caregiving. Recent use of corporal punishment is also related significantly and negatively to respondent's sex. This correlation indicates that those respondents reporting higher levels of recent use tend to be female. Although there is a significant relationship between recent use of corporal punishment and respondent's sex, there is not a significant relationship between respondent's sex and the usual use of corporal punishment.

The two dependent variables, usual and recent use of corporal punishment, have some common associations with particular sociodemographic control variables. High levels of reported use of corporal punishment are characteristic of respondents who are young, with low levels of education and household income. High levels of reported usual use of corporal punishment are associated with larger household size, older children, and those respondents showing a preference for Conservative Protestant denominations. High levels of reported recent use of corporal punishment are characteristic of female respondents and high levels of caregiving.

The variable, respondent's view of the importance of obedience, hypothesized as an intervening factor between the relationship of the independent and dependent variables, is related significantly to both the usual use and the recent use of corporal punishment. Higher

levels of importance are associated with higher levels on both measures of corporal punishment use as reported by the respondent.

Although there is a relatively strong relationship ( $r = .49$ , Table 2) between the independent variable, adherence to Christian fundamentalism, and respondent's religiosity hypothesized as an intervening variable, the relationship of religiosity and the dependent variable, the usual use of corporal punishment, although significant, is rather weak ( $r = .11$ , Table 2). In addition, religiosity is not related significantly to the other dependent variable, recent use of corporal punishment. In other words, adherence to Christian fundamentalism is associated with frequent religious group involvement but religious group involvement is associated only minimally with respondent's usual use of corporal punishment and is not associated significantly with recent use of corporal punishment.

#### The Usual Use of Corporal Punishment

The initial model (Table 3, Model 1) estimates the effects of adherence to Christian fundamentalist beliefs on the usual use of corporal punishment ("How often do you spank or slap?") through logistic regression. As expected from the Pearson correlations, those parents who adhere to Christian fundamentalist beliefs are more likely than those who do not to use corporal punishment usually as a form of discipline.

In Model 2 (Table 4), a test for spuriousness of the relationship between adherence to Christian fundamentalist beliefs and the usual use of corporal punishment was conducted by entering selected sociodemographic variables into the logistic regression equation. The

Table 3: Logistic regression of usual use of corporal punishment on Christian fundamentalism.

Model 1					
Variable	Parameter estimate	Standard error	Wald Chi-square	Pr > Chi-square	Standardized estimate
Fundamentalism	.19	.033	45.65	.0001	.32
-2 Log Likelihood $X^2$	47.74				
Degrees of freedom	1				
p-value	.0001				
Pseudo $R^2$	.04				
Somers' D	.28				

results indicate that the relationship between adherence to Christian fundamentalist beliefs and usual use of corporal punishment is not spurious. Although there is a substantial, significant reduction in its strength as an explanatory variable, as measured by a reduction in the Wald chi-square (45.65, Table 3, 19.12, Table 4), adherence to Christian fundamentalist beliefs continues to be a significant predictor for reported use of corporal punishment. Overall, the model predicts usual use of corporal punishment significantly ( $p < .0001$ ). As compared to Table 3, the addition of the control variables results in more than doubling the -2 log likelihood  $X^2$  value of the overall model (47.74, Table 3, as compared to 112.88, Table 4) and explaining more than twice the variance in reported use of corporal punishment (Pseudo  $R^2 = .04$ , Table 3, Pseudo  $R^2 = .09$ , Table 4). The results indicate that, although

Table 4: Logistic regression of usual use of corporal punishment on Christian fundamentalism and selected socioeconomic and demographic characteristics.

Model 2					
Variable	Parameter estimate	Standard error	Wald Chi-square	Pr > Chi-square	Standardized estimate
Fundamentalism	.14	.03	19.12	.0001	.23
Respondent's sex	-.05	.19	.06	.8120	-.01
Respondent's age	-.08	.02	20.24	.0001	-.25
Respondent's education	-.07	.04	3.05	.0810	-.09
Level of caregiving	.01	.02	.17	.6787	.02
Household income	.00	.00	.42	.5147	-.03
Household size	.53	.12	18.48	.0001	.21
Child's sex	.37	.17	4.80	.0284	.10
Child's age	.18	.08	4.76	.0292	.10
White	.31	.25	1.54	.2139	.06
Conservative Protestant	.06	.20	.10	.7481	.02
Northeast	-.00	.25	.00	.9965	-.00
Northcentral	-.03	.22	.02	.8764	-.01
West	.09	.25	.15	.7022	.02
-2 Log Likelihood $X^2$	112.88				
Degrees of freedom	14				
p-value	.0001				
Pseudo $R^2$	.09				
Somers' D	.43				
Change in $X^2$	65.14 <sup>a</sup>				

<sup>a</sup> significant at the .05 level



Christian fundamentalism is an important predictor of the usual use of corporal punishment, it is by no means the only predictor.

Variables significant in the model include respondent's age, household size, child's age, and child's sex in addition to adherence to Christian fundamentalist beliefs. With other variables controlled, younger parents are more likely than older parents to report usually using corporal punishment as a form of discipline. This finding may be the result of the level of maturity of older parents as manifested in noncorporal forms of discipline. Older parents also may have had more time to have established relationships with others who can act as a source of support; younger parents may be just beginning to cultivate such support. Older parents in this study are not necessarily more experienced as parents; because of sample limitations imposed, there are no children in the household five years of age or older.

Parents in larger households are more likely than those in smaller households to report using corporal punishment as a form of discipline. Larger households may be more stressful than smaller households. With more people in the house, there may be an increase in the amount of personal needs and demands that have to be accommodated. Larger households would tend to have smaller amounts of personal space for each member than smaller households, a factor that could lead to higher stress levels and reliance on corporal punishment.

Older children are more likely than younger children to receive corporal punishment as a form of discipline. More specifically, four-year-olds are more likely than one-year-olds to be disciplined by their parents with the use of corporal punishment. Younger children are not

as active or mobile as older children; therefore, they may be less likely to get into trouble. Parents also may feel more comfortable spanking an older child, reasoning that he or she may be able to handle the punishment physically. It is at the older ages that the child begins to express his or her independence, and acts of disobedience may increase in number. Parents may view that behavior of younger children as normal and the same behavior by older children as acts of disobedience. Parents of boys are more likely than parents of girls to report using corporal punishment. In households where the focal child is a boy, respondents report higher levels of usual use of corporal punishment. This finding may be a result of societal norms that in general, girls are not to be physically harmed and the expectation that boys should be able to take physical punishment.

Neither of the traditional measures of social class, household income and respondent's education, is a significant predictor of usual use of corporal punishment. This finding is somewhat surprising, based on the significantly negative zero-order correlations (Table 2). This model suggests that it is not social class that is a factor in the usual use of corporal punishment; rather, when other variables, including age, household size, and Christian fundamentalism, are included in a multivariate analysis with measures of social class, it is the other variables, rather than social class, that are the predictors of the usual use of corporal punishment.

In the third step (Table 5), a test for intervention was conducted. The variable, respondent's view of the importance of obedience was introduced into the model. If the relationship of adherence to Christian fundamentalism and the usual use of corporal

Table 5: Logistic regression of usual use of corporal punishment on Christian fundamentalism, respondent's view of the importance of obedience, and selected socioeconomic and demographic characteristics.

Model 3					
Variable	Parameter estimate	Standard error	Wald Chi-square	Pr > Chi-square	Standardized estimate
Fundamentalism	.12	.03	13.20	.0003	.20
Respondent's sex	-.12	.19	.39	.5339	-.03
Respondent's age	-.08	.02	18.53	.0001	-.24
Respondent's education	-.07	.04	2.60	.1173	-.09
Level of caregiving	.00	.02	.09	.7655	.02
Household income	-.00	.00	.31	.5765	-.03
Household size	.53	.12	18.63	.0001	.21
Child's sex	.40	.17	5.51	.0189	.11
Child's age	.17	.08	4.25	.0392	.10
White	.37	.25	2.27	.1323	.07
Conservative Protestant	.03	.20	.02	.8797	.01
Northeast	.02	.25	.01	.9347	.00
Northcentral	.02	.22	.01	.9251	.01
West	.14	.25	.32	.5698	.03
Obedience	.12	.04	7.94	.0048	.14
-2 Log Likelihood $X^2$	120.62				
Degrees of freedom	15				
p-value	.0001				
Pseudo $R^2$	.10				
Somers' D	.45				
Change in $X^2$	7.74				

punishment is due to the importance of obedience, then, when the factor of obedience is controlled, the relationship should vanish or be substantially reduced, as indicated by a lower Wald chi-square value and a change in its level of significance. If this happens to the degree that Christian fundamentalism no longer significantly predicts usual use of corporal punishment, then respondent's view of the importance of obedience will be considered to be an intervening variable.

Respondent's view of the importance of obedience does intervene somewhat between the initial relationship of adherence to Christian fundamentalist beliefs and usual use of corporal punishment, as shown by the comparison between the chi-square values (19.12, Table 4, vs. 13.20, Table 5). Because adherence to fundamentalism is significant in the model, however, it cannot be concluded that obedience is an intervening variable. Rather, it is another significant predictor of the usual use of corporal punishment, and is accompanied by a significant change in the model chi-square between tables 4 and 5 (7.74). The full model significantly explains 10 percent (Pseudo  $R^2 = .10$ ,  $p < .0001$ ) of the variance in reported use of corporal punishment.

Finally, a test for intervention was conducted by introducing the variable, respondent's religiosity, into the equation along with adherence to Christian fundamentalism and the same selected control variables (Table 6). Although there is a reduction in the magnitude of the chi-square for fundamentalism (19.12, Table 4 to 11.63, Table 6), adherence to fundamentalism remains a significant predictor of usual use of corporal punishment. Unlike

Table 6: Logistic regression of usual use of corporal punishment on Christian fundamentalism, respondent's religiosity, and selected socioeconomic and demographic characteristics.

Model 4					
Variable	Parameter estimate	Standard error	Wald Chi-square	Pr > Chi-square	Standardized estimate
Fundamentalism	.13	.04	11.63	.0007	.21
Respondent's sex	-.04	.19	.05	.8213	-.01
Respondent's age	-.08	.02	20.23	.0001	-.25
Respondent's education	-.08	.04	3.57	.0587	-.11
Level of caregiving	.01	.02	.16	.6862	.02
Household income	-.00	.00	.45	.5004	-.03
Household size	.53	.12	18.50	.0001	.21
Child's sex	.37	.17	4.82	.0282	.10
Child's age	.18	.08	4.82	.0282	.10
White	.31	.25	1.61	.2043	.06
Conservative Protestant	.05	.20	.07	.7888	.01
Northeast	-.00	.25	.00	.9924	-.00
Northcentral	-.04	.22	.04	.8413	-.01
West	.09	.25	.14	.7106	.02
Religiosity	.02	.03	.51	.4771	.04
-2 Log Likelihood $X^2$	113.41				
Degrees of freedom	15				
p-value	.0001				
Pseudo $R^2$	.09				
Somers' D	.43				
Change in $X^2$	.53				

obedience, respondent's religiosity is not a significant predictor of usual use of corporal punishment in the multivariate model.

#### The Recent Use of Corporal punishment

Adherence to Christian fundamentalism is a significant predictor ( $X^2 = 13.80$ ,  $p > .001$ , Table 7) of recent use of corporal punishment ("About how many times have you had to spank (focal child) in the past week?"). Despite this significance, the pseudo  $R^2$  value indicates that only 1 percent of the variation in recent use of corporal punishment can be accounted for by this model. This finding is not surprising given the relatively low zero-order correlation of .15 between Christian fundamentalism and recent use of corporal punishment (Table 2).

Table 7: Logistic regression of recent use of corporal punishment on Christian fundamentalism.

Model 1					
Variable	Parameter estimate	Standard error	Wald Chi-square	Pr > Chi-square	Standardized estimate
Fundamentalism	.10	.03	13.80	.0002	.17
-2 Log Likelihood $X^2$	13.90				
Degrees of freedom	1				
p-value	.0002				
Pseudo $R^2$	.01				
Somers' D	.14				

In the second step (Table 8), a test for spuriousness of the relationship between adherence to Christian fundamentalism and recent use of corporal punishment was conducted by entering selected sociodemographic variables into the regression equation. Based on the change in the level of chi-square for Christian fundamentalism compared with model 1 (from 13.80, Table 7, to 5.44, Table 8) the original relationship is somewhat spurious. A change in the overall chi-square from 13.90, (Table 7) to 71.97 (Table 8) indicates that model 2 is a much better predictor than model 1 of recent use of corporal punishment. According to this model, adherence to Christian fundamentalism, respondent's age, and child's sex are significant predictors of recent use of corporal punishment, as they were for predicting the usual use of corporal punishment (Table 5). In this model, respondent's education emerged as a significant predictor of recent use of corporal punishment; however, it was not significant in explaining the variance in the usual use of corporal punishment.

Although an examination of the zero-order correlations (Table 2) shows that race and child's sex are not related significantly to recent use of corporal punishment, in this model they emerge as significant predictors. Whites are more likely than nonWhites to have reported recent use of corporal punishment. This finding is not consistent with the findings of previous studies that indicate that Blacks have a greater tendency than Whites to use corporal punishment. However, in the present study, the findings may be the result of analyzing a sample with relatively few Blacks and other minorities (nonWhites = 14%, Table 1). Respondent's level of caregiving was not a predictor of usual use of corporal punishment (Tables 4 and 5). However, in this model, respondent's level of caregiving surfaced as a

Table 8: Logistic regression of recent use of corporal punishment on Christian fundamentalism and selected socioeconomic and demographic characteristics.

Model 2					
Variable	Parameter estimate	Standard error	Wald Chi-square	Pr > Chi-square	Standardized estimate
Fundamentalism	.07	.03	5.44	.019	.12
Respondent's sex	-.26	.19	1.88	.170	-.07
Respondent's age	-.06	.02	10.43	.001	-.19
Respondent's education	-.08	.04	3.90	.048	-.11
Level of caregiving	.05	.02	6.30	.012	.12
Household income	-.00	.00	1.24	.265	-.06
Household size	.08	.12	.44	.508	.03
Child's sex	.39	.17	5.21	.022	.10
Child's age	.05	.08	.36	.550	.03
White	.59	.25	5.42	.019	.11
Conservative Protestant	-.09	.20	.21	.644	-.02
Northeast	.20	.25	.69	.407	.04
Northcentral	-.02	.22	.01	.911	-.01
West	.07	.25	.07	.784	.01
-2 Log Likelihood $X^2$	71.97 <sup>c</sup>				
Degrees of freedom	14				
p-value	.0001				
Pseudo $R^2$	.05				
Somers' D	.34				
Change in $X^2$	58.07 <sup>a</sup>				

<sup>a</sup> significant at the .05 level



significant and positive predictor of recent use of corporal punishment. This inconsistency as a predictor of corporal punishment may be due to the differing methods of operationalizing the respondent's use of corporal punishment. If the usual use of corporal punishment measure referred to the focal child only, as does the recent use of corporal punishment, then the level of caregiving may have been a significant predictor for that measure of corporal punishment as well.

Finally, the respondent's view of the importance of obedience was tested for possible intervening effects on the relationship between adherence to Christian fundamentalism and recent use of corporal punishment (Table 9). With the inclusion of the obedience measure, the significance of the relationship between Christian fundamentalism and corporal punishment is reduced to the point of almost exceeding the .05 level of significance. The size of the chi-square statistic for fundamentalism is reduced (from 5.44 to 4.00), but the amount of reduction is not significant. Respondent's age, level of caregiving, and race, along with child's sex, remain significant predictors of recent use of corporal punishment. Obedience is not a significant predictor of recent use of corporal punishment, but its inclusion in the model reduces the influence of education until it is no longer significant.

Table 9: Logistic regression of recent use of corporal punishment on Christian fundamentalism, respondent's view of the importance of obedience, and selected socioeconomic and demographic characteristics.

Model 3					
Variable	Parameter estimate	Standard error	Wald Chi-square	Pr > Chi-square	Standardized estimate
Fundamentalism	.07	.03	4.00	.045	.11
Respondent's sex	-.29	.19	2.28	.131	-.08
Respondent's age	-.06	.02	9.92	.001	-.19
Respondent's education	-.08	.04	3.62	.056	-.11
Level of caregiving	.06	.02	6.00	.014	.12
Household income	-.00	.00	1.24	.266	-.06
Household size	.08	.12	.43	.511	.03
Child's sex	.40	.17	5.49	.019	.11
Child's age	.04	.08	.25	.619	.02
White	.61	.25	5.67	.017	.12
Conservative Protestant	-.12	.20	.34	.560	-.03
Northeast	.21	.25	.69	.405	.05
Northcentral	-.01	.22	.00	.977	-.00
West	.08	.25	.11	.745	.02
Obedience	.05	.04	1.32	.250	.06
<hr/>					
-2 Log Likelihood $X^2$	73.27				
Degrees of freedom	15				
p-value	.0001				
<hr/>					
Pseudo $R^2$	.06				
Somers' D	.34				
Change in $X^2$	3.84				

## SUMMARY AND CONCLUSIONS

### Purpose

The purpose of this study was to examine the relationship between adherence to Christian fundamentalist beliefs and reported use of corporal punishment by parents of preschool children. Potential intervening effects of the respondent's religiosity and the respondent's view of the importance of obedience were to be examined. The relationships between adherence to Christian fundamentalism and two separate measure of reported use of corporal punishment, usual and recent, the possible intervening variables, and selected sociodemographic variables were explored.

### Procedure

The data were obtained from the National Survey of Families and Households, gathered between March 1987 and May 1988. Face-to-face interviews were conducted with a national probability sample of 13,017 respondents. One adult per household was selected randomly to be the primary respondent. Only data from the primary respondent were used in this study.

For the study, a subsample of primary respondents was selected. Included were individuals who were currently married and who had at least one child over 12 months of age and under 5 years of age, had no children over 4 years of age, and for whom the "focal child," the child on whom the respondent was asked to focus when answering specific

questions about child rearing, discipline, and parental behavior, was the biological child of the respondent. A total of 620 respondents met these criteria. The sample was reduced to 546 through the elimination of 7 cases for which sex of the focal child was not known, and 67 cases with missing data on at least one of the several variables used to assess Christian fundamentalism, religiosity, and denominational preference.

Hypotheses were presented and tested using logistic regression. The initial relationship between the independent variables, adherence to Christian fundamentalist beliefs, and dependent variables, the usual and recent use of corporal punishment, were tested for spuriousness by controlling for particular socioeconomic and demographic variables. In addition, the relationships between the independent and dependent variables, controlling for the socioeconomic and demographic variables, was tested for intervention utilizing variables hypothesized to intervene.

### Major Findings

A major finding of this study is that adherence to Christian fundamentalism, when controlling for sociodemographic variables, is a significant predictor of reported use of corporal punishment as assessed by both measures of corporal punishment. The relationship is not spurious with respect to selected socioeconomic and demographic variables.

It is clear that results vary, with regard to other predictors of corporal punishment, according to the measure of reported use of corporal punishment. In addition to Christian fundamentalism, only respondent's age and child's sex are significant in both models.

Respondent's level of education, level of caregiving, and race are significant predictors of *recent use* of corporal punishment; household size, child's age, and the respondent's view of the importance of obedience are significant predictors of *usual use* of corporal punishment. Christian fundamentalists have advocated (Christenson, 1970; Dobson, 1976; Meir, 1977) and demonstrated normative support for the use of corporal punishment as a method of discipline both in the home and in educational settings (Ellison & Sherkat, 1993a; Grasmick, Morgan, & Kennedy, 1992). Analyses of these data indicate that not only are those who adhere to Christian fundamentalist beliefs supporters of the use of corporal punishment, but that they also make use of corporal punishment when disciplining their children. From a symbolic interaction perspective, it can be reasoned that those who adhere to Christian fundamentalist beliefs would tend to have those beliefs supported and reinforced whenever they socialize with others who share the same beliefs. The findings of this study regarding the role of religiosity as an intervening variable, as measured by church attendance, offer partial support for this perspective.

Another major finding of the study is the role the socioeconomic variables play in the prediction of the use of corporal punishment. Although preliminary analysis shows a significant inverse relationship with both measures of corporal punishment (Table 2), respondent's level of income and level of education are not significant predictors of respondent's report of usual use of corporal punishment in the final multivariate analysis.

For the dependent variable, recent use of corporal punishment, level of income is not a significant predictor; however, level of education is significant, but just minimally ( $p > .048$ ,

Model 2, Table 8). When the variable, importance of obedience, is introduced into the model, level of education is no longer a significant predictor of the recent use of corporal punishment ( $p > .056$ ). The results regarding the relationship between the use of corporal punishment and the socioeconomic and demographic variables are not surprising. In general, the lack of significant predictive power of the two socioeconomic measures, income and education, bolsters Erlanger's (1974) finding regarding social class that "there is indeed some correlation, but that it is probably not strong enough to be of great theoretical or practical significance" (Erlanger, 1974, p. 81).

#### Testing the Hypotheses

The hypothesis that adherence to Christian fundamentalism is a factor in predicting the use of corporal punishment is supported. Christian fundamentalism is a significant predictor of reporting both the usual use of corporal punishment of discipline and having spanked the focal child the previous week.

The hypothesis that the relationship between Christian fundamentalism and corporal punishment is not spurious also is supported. The inclusion of the control variables in models predicting usual use of corporal punishment and recent use of corporal punishment results in a slight decline in the importance of Christian fundamentalism in the models. Because adherence to Christian fundamentalism is significant in both models, however, its relationship to the use of corporal punishment is not spurious.

The hypothesis that the importance of obedience is an intervening variable is not supported. The variable assessing obedience is a significant predictor of the usual use of corporal punishment; however, when including the obedience variable into the model the original relationship remains significant. The variable assessing obedience is not significant in the model predicting the recent use of corporal punishment. However, when obedience is introduced into the model, the variable assessing adherence to Christian fundamentalism decreases considerably in significance.

The hypothesis that religiosity is an intervening variable is not supported. The strength of the relationship between Christian fundamentalism and the usual use of corporal punishment is relatively unchanged with the introduction of religiosity into the model. In addition, religiosity is not a significant predictor of the usual use of corporal punishment. Also, religiosity did not have a significant correlation with the recent use of corporal punishment, a criterion for possible intervention, and therefore was not included in a test for intervention.

#### Relationship to Previous Research

Findings are consistent with those of Wauchope and Straus (1990) with regard to gender differences and reported use of corporal punishment. Male respondents were no more likely than female respondents to use corporal punishment. Although Wood (1990) reported that older adults *support* corporal punishment, this study indicates that older respondents are less likely than younger respondents to *use* corporal punishment. Household size significantly

predicted usual use of corporal punishment. This finding supports the findings of others that in larger households there is a tendency for corporal punishment to be more common (Nye, Carlson, & Garret, 1970), for parents to use more punitive types of discipline and to become more rule-oriented (Wagner, Schubert, & Schubert, 1985). Results of the study replicate the findings of others (Maccoby & Jacklin, 1974; Straus & Donnelley, 1993) that boys typically are disciplined with corporal punishment more often than girls. Ellison and Sherkat (1993a) found strong support for the use of corporal punishment among Blacks. That finding is not reflected by this analysis. In this study, Whites were more likely than nonWhites to have used corporal punishment recently. No one region was any more likely than the other to have reported using corporal punishment. Hyman (1990) asserts that those living in the south are strong supporters of the use of corporal punishment. However, Flynn's (1994) research indicates that the real difference with regard to support of corporal punishment is the significant lack of support for this type of discipline found in the northeast, a finding not reflected in this study.

### Implications of the Study

The findings of this study indicate that those who adhere to Christian fundamentalist beliefs are more likely than those who do not to use corporal punishment when disciplining their children. Anyone working with families in a clinical setting should be cognizant of this relationship. Clinicians should be made aware that not only do those who adhere to Christian fundamentalist beliefs support the use of corporal punishment, but they also are more likely



than those who do not adhere to such beliefs to use corporal punishment when disciplining their children.

Christian fundamentalist doctrine asserts that it is the responsibility of the father to administer corporal punishment. The findings of this study, limited to married couple households, indicate that the father is no more likely than the mother to use corporal punishment. Further research should be conducted to explain this inconsistency between belief and behavior. Also, further studies could be done concerning how single-parent mothers who adhere to Christian fundamentalism discipline their children.

The relationship between the use of corporal punishment and adherence to Christian fundamentalism should be tested using a sample that includes a substantial number of respondents from ethnic groups other than those typically classified as White.

One Christian fundamentalist view of discipline, especially corporal punishment, is that it is done to benefit the child, that the child will grow up to respect authority and behave in such a way as to avoid negative consequences. Studies concerning the consequences of being disciplined as a child on older children could be done to test for negative and positive consequences of corporal punishment. Ideally, the children included in this study would make an excellent sample for analysis.

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