The Contributions of Family Poverty Indicators to Professionals' Decision-Making in Child Physical Punishment Cases: An Analysis of the Canadian Incidence Study of Reported Child Abuse and Neglect

by

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A Thesis
Submitted to the Faculty of Graduate Studies
In Partial Fulfillment of the Requirements for the Degree of

MASTER OF SCIENCE

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THE UNIVERSITY OF MANITOBA

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Acknowledgements

I would like to thank my advisor, Dr. Joan Durrant. Dr. Durrant was a constant support for me through my research. The support and encouragement I received from you made it possible for me to continue even in the most difficult times. Thank you for your suggestions, support, and encouragement.

I would also like to thank my committee members, Dr. Doug Brownridge and Dr. Grant Reid for their prompt feedback and valuable suggestions. Your suggestions have significantly strengthened my thesis.

I would also like to thank my fellow graduate students in the Family Social Science Department. Your friendships made my graduate school experience wonderfully positive.

And finally, I would like to thank my family. I am truly blessed with the most loving and supportive family, without whom I would never have been able to achieve this accomplishment. Thank you Mom, Dad, Theo, Trevor, Kori and Padmaja.

Abstract

This study examined the predictive influence of family poverty on professionals' decision-making in cases of child physical punishment reported to child welfare agencies. Data from the Canadian Incidence Study of Reported Child Abuse and Neglect were used. An examination was made of the influence of five indicators of poverty on six investigation outcomes. The poverty indicators were family size, household education, whether the family lived in public housing, whether the family's main income source was social assistance, and whether the family lived in unsafe housing conditions. In addition, a Poverty Indicators Index was constructed from these five variables to assess whether the family's "total picture" influenced investigation outcomes. The outcome variables examined in this study were case substantiation, ongoing child welfare services, child and family referrals, out of home placement, applications to child welfare court and police involvement. The predictive power of the poverty indicators and the Poverty Indicators Index was assessed through logistic regression analyses. Together, the predictor variables did not account for more than 6% of the explained variance of any of the outcome variables. Unsafe housing was the only poverty indicator found to be a significant predictor of all the outcome variables, with the exception of police involvement. In addition, the magnitude of the Poverty Indicators Index did not affect the likelihood of any of the investigation outcomes. These findings suggest that poverty indicators do not influence professional decision making in cases of physical punishment reported to child welfare agencies in Canada. The findings have implications for the ongoing development of policy aimed at reducing parental use of physical punishment.

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CHAPTER I

Introduction

Section 43 of the Criminal Code of Canada states that "every schoolteacher, parent or person standing in the place of a parent, is justified in using force by way of correction toward a pupil or child, as the case may be, who is under his care if the force does not exceed what is reasonable under the circumstances." This law is descended from ancient Roman law and was codified in Canada in 1892 (Durrant & McGillivray, forthcoming). Recently, section 43 faced a constitutional challenge in the Supreme Court of Canada on the grounds that it violates several sections of the Charter of Rights and Freedoms as well as Articles 3, 19 and 28 of the UN Convention on the Rights of the Child. If section 43 had been repealed, parents would no longer be able to justify physical assault against a child in the name of correction. Assault laws would apply equally to adult and child victims.

Supporters of the challenge hold that children should be given the same protection from physical assault as that given to adults. Some opponents of the challenge argue that if section 43 were repealed, families living in poverty would be unfairly targeted when their life stresses lead them to physically punish their children (Canada Family Action Coalition, n.d,). The latter argument is based on an assumption that families living in poverty are more likely to: 1) use physical punishment, 2) to be reported to child welfare authorities, 3) to have allegations against them substantiated, and 4) to receive harsher outcomes of investigations based on professional decision-making. These assumptions, however, have not been validated. The purpose of the present study is to assess the validity of the

assumptions that families living in poverty reported for inappropriate physical punishment are more likely to have allegations against them substantiated and to receive harsher outcomes of investigations through an examination of a national sample of reports to child welfare agencies. The question of whether living in poverty is related to parental striking of children dates back several decades. To provide a context for the present research question, the literature in this area will be reviewed in the following sections.

Child Physical Abuse and Child Physical Punishment

There are no consistently used definitions of child physical abuse or physical/ corporal punishment, although attempts have been made. For example, Straus and Donnelly (1993) have attempted to distinguish punishment from abuse on the basis of caregiver intent. They define physical punishment 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" (1993, pp. 420). This definition, however, fails to recognize that most physical abuse injuries result from an intent to punish, not to injure (Gil, 1970; Kadushin & Martin, 1981; Trocmé & Durrant, 2003; Trocmé, MacLaurin, Fallon, et al., 2001).

Health Canada (2001) has based its definition of abuse on the presence or absence of injury, regardless of caregiver intent: "Child physical abuse is most commonly defined as the deliberate application of force to any part of a child's body, which results in a non-accidental injury" (p. 3). This definition, however, fails to take into account the types of physical force that do not result in injury; for example, the child may be forced to hold an uncomfortable position or stand motionless, kneel on

hard objects, retain body wastes, perform strenuous exercise, or ingest foul tasting substances (soap, hot pepper sauce, lemon juice).

Other attempts to distinguish punishment from abuse have been based on criteria such as social norms and the particular acts perpetrated (e.g., kicking versus hitting, use of a belt versus a hand). These criteria, however, are subjectively defined by cultures and individuals.

The definitional issue is further complicated by the psychological dimension of physical punishment, which can include fear, humiliation, and intimidation and can constitute psychological abuse. An act that does not injure the body can be psychologically damaging.

The futility of attempting to distinguish between punishment and abuse is reflected in the lack of international agreement regarding the definition of abuse in law. For example, three American states legally define corporal punishment as that limited to "nondeadly force," while others define it as "moderate" or "necessary" use of force (Davidson, 1997). Canadian law considers some use of force to be "justifiable" while no corporal punishment of children is permitted in Croatia, Germany, Israel, Sweden, Finland, Norway, Austria, Denmark, Cyprus, Latvia, or Iceland. Even within a nation, there is a lack of consistency in legal definitions. For example, a study of cases acquitted under section 43 of the Criminal Code of Canada revealed that no criterion is consistently used in the courts to distinguish between physical punishment and child physical abuse (McGillivray, 1998).

Ongoing attempts to distinguish punishment from abuse are rooted in a fundamental belief that they are differently motivated and executed. The literature,

however, does not support this hypothesis. Most child physical abuse occurs within a disciplinary episode (Gil, 1970; Kadushin & Martin, 1981; Trocmé & Durrant, 2003; Trocmé, MacLaurin, Fallon, et al., 2001). In addition, many studies have demonstrated that physical punishment places children at risk of injury (Dietz, 2000; Frias-Armenta & McCloskey, 1998; Gelles, 1976; Gershoff, 2002; Korbin, Coulton, Lindstrom-Ufuti & Spilsbury, 2000; Youssef, Attia & Kamel, 1998; Straus, 2000).

Gradually, it is becoming recognized that most physical abuse *is* physical punishment and that attempts to distinguish them conceptually are not useful (Dietz, 2000; Gershoff, 2002; Korbin, Coulton, Lindstrom-Ufuti & Spilsbury, 2000; McGillivray, 1998). However, researchers do attempt to make distinctions on the basis of intensity or severity of the act in order to study separately the correlates of milder and more severe violence among children. In the following review of the literature, the term "abuse" will refer to more severe forms of violence, although it should be noted that there is no consensus among researchers as to how severity is defined.

Relationship between Poverty and Child Abuse

In the early years of child abuse research, findings suggested that a personality or psychiatric disorder characterized abusive parents. For example, in 1968, Steele and Pollock found that, of a sample of physically abusive parents, all had emotional problems sufficiently severe to be accepted for psychiatric treatment. By the 1970's, this explanation began to be questioned. David Gil (1970) was the first researcher to propose an alternative explanation. He suggested that social and cultural factors, such as living in poverty influence the occurrence of child physical abuse. He argued that

families living in poverty are more likely to approve of corporal punishment, be less inhibited in the discharge of aggressive impulses, experience greater environmental stress, and have fewer opportunities to escape from the care-giving role. Gelles (1976) also critiqued the psychopathological model of child abuse, arguing that it was based on weak methodology and was contradicted by findings of many studies.

Since Gil (1970) and Gelles (1976) altered the field with their theories of child physical abuse, numerous studies have provided evidence that child physical abuse potential and living in poverty are linked. For example, Zuravin (1989) found a link between the number of families reported for child physical abuse and poverty indicators, including annual income, family type, indicators of social support, and evidence of transiency. Among a population of 764,000 residents of Baltimore, Maryland in 1987, Zuravin found that one of the strongest predictors of reported child physical abuse was having an income below the poverty line. Inadequate social support and economic stress indicators were also strongly linked to child physical abuse reports.

In the Third National Incidence Study on Child Abuse and Neglect, Sedlak and Broadhurst (1996) examined cases of reported child abuse in a nationally representative sample of 42 counties in the United States. The reporters were community professionals serving children and families in various settings including agencies other than child protection services. Sedlak and Broadhurst (1996) differentiated two categories of child physical abuse, the Endangerment Standard (lower levels of violence) and the Harm Standard (high levels of violence). They found that households achieving annual incomes below the poverty line were 22 times

more likely to experience violence categorized under the Harm Standard and 25 times more likely to experience violence categorized under the Endangerment Standard as compared to households with annual incomes above $30,000. Children from larger families were also more likely to be victims of physical abuse under both the Harm and Endangerment Standards.

In the findings of two national surveys conducted in the United States in 1976 and 1983, Gelles (1992) demonstrated that although child physical abuse occurred across the full spectrum of income, severe violence, as defined by the Conflict Tactics Scale (CTS; Straus & Hamby, 1997), was more likely to occur in households with an annual income below the poverty line. Furthermore, the severity of the injuries suffered by the abused children was higher in families living in poverty. The sample used in this study was drawn by a survey firm and was representative of the population.

This research suggests that living in poverty is associated with higher levels of child physical abuse. To explicate this apparent relationship, several explanations based on studies of poverty and its correlates have been offered. Two divergent explanations dominate the research regarding this relationship. The first explanation posits that the relationship between poverty and child physical abuse is valid - that families living in poverty appear to be at increased risk for child physical abuse due to 1) their higher degrees of stress, 2) higher levels of approval and use of corporal punishment and 3) a tendency to adopt authoritarian parenting styles. The second explanation suggests that the association between living in poverty and child physical abuse rates is spurious - more the result of bias in research and practice than a

reflection of reality. The evidence for each of these positions is examined in the following sections.

Research Findings Supporting the Poverty-Child Physical Abuse Link

Numerous studies have concluded that poverty and child physical abuse are linked due to the higher levels of stress experienced by parents and higher parental approval and use of corporal punishment (Cadzow, Armstrong & Fraser, 1999; Dietz, 2000; Gelles, 1976; Gelles, 1989; Frias-Armenta & McCloskey, 1998; Korbin, Coulton, Lindstrom-Ufuti & Spilsbury, 2000; Strauss, 2000; Whipple and Webster-Stratton, 1991; Youssef, Attia & Kamel, 1998). In the following sections, evidence for this claim will be provided.

Environmental Stress and Child Physical Abuse

Families living in poverty are more likely to report experiencing stress due to finances and parenting relationships than those of high SES (Cadzow, Armstrong & Fraser, 1999; Gelles, 1989; Gillham, Tanner, Cheyne, Freeman, Rooney, & Lambie, 1998; Whipple and Webster-Stratton, 1991), which may increase their child physical abuse risk. Findings supporting this position were obtained by Whipple and Webster-Stratton (1991), who found that families with physically abusive parents were more likely to be poor and were more likely to report higher levels of stress and anxiety than non-abusive parents. These researchers suggest that, given any level of stress, persons living in poverty are more likely to experience breakdowns due to fewer financial, community and inner-coping resources. These breakdowns are characterized by more explosive anger and harsh disciplinary techniques resulting in increased child abuse potential.

Cadzow, Armstrong and Fraser (1999) found that parental stress levels related to finances and relationships are significantly associated with heightened child physical abuse potential, as measured using the Child Abuse Potential Inventory (CAP). Cadzow et al. (1999) concluded that stress factors are the most powerful predictors of child physical abuse potential, surpassing income in their predictive ability.

In his examination of the role of poverty in child abuse risk, Gelles (1989) put forth the 'economic deprivation' hypothesis. He has proposed that the stress of raising children is exacerbated in families with inadequate economic resources. Examining families headed by single parents, Gelles demonstrates that it is poverty and its associated stress, not single parenthood per se, that is the greatest risk factor for child physical abuse.

Some of the increased stress and anxiety experienced by parents living in poverty may be due to fewer opportunities to escape the role of caregiver. Cowen (2001) suggests that during crises, stress is often confounded by the lack of accessible, alternative childcare experienced by families living in poverty. She found that counties in the US which provide alternative childcare through the implementation of crisis childcare programs demonstrated significantly lower reported incidence of child maltreatment than those that did not. Therefore, family/parental stress combined with an inability to escape the role of caregiver due to economic constraints may be a significant precipitating factor in child physical abuse.

Approval and Use of Corporal Punishment

Some research findings suggest that the relationship between poverty and child physical abuse potential may be mediated by approval and use of corporal punishment (Crouch & Behl, 2000). There is evidence to suggest that child physical abuse potential is influenced by parental acceptance and use of corporal punishment (Dietz, 2000; Frias-Armenta & McCloskey, 1998; Gelles, 1976; Korbin, Coulton, Lindstrom-Ufuti & Spilsbury, 2000; Youssef, Attia & Kamel, 1998; Straus, 2000). Child physical abuse usually occurs within the context of a disciplinary interaction in which the parent attempts to control the child's behaviour with physical punishment (Gil, 1970; Kadushin & Martin, 1981; Trocmé & Durrant, 2003).

For many years, researchers have hypothesized that members of different social classes tend to have different methods of disciplining their children. Bronfenbrenner (1958) summarized twenty-five years of research in this area concluding that parents living in poverty are more likely to use physical punishment than parents not living in poverty. Eamon and Zuehl (2001) found that poverty was significantly correlated with frequency of spanking by mothers. They propose that having an annual income and family size placing a household below the poverty standard leads to chronic strain and stress and maternal depression which increases the probability of the use of physical punishment. It has also been suggested that parents living below the poverty line may be more likely to approve of and use corporal punishment as a result of limited parenting skills due to lack of education as well as high levels of family frustration and stress due to lack of resources (Davison

& Moore, 1996; Friàs-Armenta & MacCloskey, 1998; Flynn, 1994; Wilson &

Whipple, 2001; Youssef et. al., 1998).

Authoritarian Relationships

Some research findings suggest that relative to families not living in poverty,

families living below the poverty line are more likely to practice an authoritarian

parenting style characterized by strict control and use of strong punitive discipline

(Aunola, Nurmi, Onatsu-Arvilommi & Pulkkinen, 1999; Melson, Ladd & Hsu, 1993).

This relationship may be attributed to a range of factors, such as parental education

levels (Aunola et al., 1999), higher value placed on obedience and conformity

(Goodnow, 1988; Piotrkowski & Katz, 1982), and a tendency to perceive social

relationships in terms of power and authority (Mortimer & Kumka, 1982; Zussman,

1978).

Housing

Some research findings suggest that housing may have an impact on child

physical abuse (Drake & Pandey, 1996; Sidebotham, Heron, & Golding, 2002).

Housing conditions and tenure may be a reflection of the neighborhood in which the

child is being raised. The neighborhood stresses and cultural values may influence

parenting styles. Poor housing conditions may also directly increase the level of

stress experienced by parents, thus influencing their parenting style.

Summary

A number of studies have provided support for the position that poverty and

child physical abuse are linked. Their findings suggest that the stresses and parenting

styles associated with poverty increases child abuse risk. The validity of these findings, however, has been called into question. A number of researchers have argued that the relationship found between poverty and child physical abuse is due more to biased sampling than to a valid link. The evidence for this position is presented in the following section.

Research Findings Supporting the Presence of Bias in the Poverty-Physical Abuse Link

A fundamental challenge to the validity of findings related to the poverty-physical abuse link is that there is no absolute definition of child physical abuse (Turbett & O'Toole, 1983). Therefore, when confronted with an ambiguous case, individuals consider a variety of factors other than degree of injury suffered by the child in deciding whether to make a report. These factors can include the family's standard of living.

There is evidence that reporting of a suspected case of child physical abuse is less likely if the potential reporter and the suspected abuser have similar characteristics, especially in terms of socioeconomic status. In a study of all registered nurses in New York state in 1990 (Pillitteri, Seidl, Smith, & Stanton, 1992), it was found that most nurses were reluctant to report hypothetical suspected child abuse cases in middle class families or those most like them. Hampton and Newberger (1985) found that the label of abuse was less likely to be applied by hospital personnel if "the diagnostician and suspected abuser share similar characteristics, especially socioeconomic status, particularly when the abuse is not serious" (p. 57). Degree of injury severity became a statistically significant predictor of reporting only when

income was excluded from the analysis. This finding suggests that individuals may rely more on poverty indicator variables than degree of injury severity when deciding whether to report a suspicion of child physical abuse.

Turbett and O'Toole (1983) found that physicians' judgments of potential child physical abuse cases were affected by the SES of the child's parents. They argue that professionals' knowledge of the "typifications" concerning child abuse, such as poverty, influences their judgment. Other researchers suggest that because families living in poverty are more likely to be receiving social assistance, they are also more likely to be in contact with social agencies staffed by social workers, who are trained to recognize and report signs of abuse (Jason, Andereck, Marks & Tyler, 1982).

Furthermore, families living in poverty are more likely than other families to live in areas in which privacy is limited and safety is an issue. Closely situated housing, apartments with thin walls, open or broken windows, and other environmental factors influence how much neighbors hear the activity inside each other's homes (Pelton, 1978). Therefore, abuse may be more easily detected in families living in poverty. Moreover, the rate of accidents and sickness occurring increases in unsafe and inadequate housing due to broken stairs, windows, and poor lighting and heating. A higher rate of accidents may increase contact with health care professionals who may attribute injuries to child physical abuse (Pelton, 1978). Therefore, families living in poverty may be more accessible to professionals and are therefore more likely to be identified to child and family services.

A national US study (Zellman, 1992) revealed that mandated reporters of child physical abuse were significantly more likely to apply the abuse label to vignettes portraying poor families than to those portraying wealthier families. The poverty indicators in the vignettes varied in subtle yet substantial ways. Zellman (1992) found that when the degree of injury to the child is mild, families living below the poverty line are more likely than wealthier families to be viewed as reportable for abuse. However, if the degree of injury is severe, wealthier families are more likely to be viewed as reportable for abuse. This research suggests that mild abuse is less tolerated when it occurs in poor families than wealthier families. However, severe abuse is judged more harshly when it occurs in wealthier families than in families living in poverty. Therefore, the apparent link between poverty and child physical abuse, whether it be valid or spurious, may be more complex than a simple linear relationship.

Some research has suggested that bias also can enter the investigation and substantiation of child abuse reports. A reported case of child physical abuse is substantiated if an investigation yields sufficient evidence that abuse has occurred and the child is found to be in need of protection. Approximately one third of child physical abuse investigations are substantiated (Trocmé et al., 2001). Many researchers have found that reports of suspected child physical abuse are more likely to be substantiated if the reports are made by professionals than if they are made by non-professionals (Drake, 1996; English & Marshall, 1999; Henderson, 1990). However, professionals do have experience with similar situations and follow concrete guidelines when recognizing and reporting suspicious cases. Therefore, cases

reported by professionals may be more likely to be substantiated because they are indeed child physical abuse cases.

There is evidence to suggest that family characteristics, such as poverty indicators, significantly influence substantiation of child physical abuse reports (Drake, 1996). However, some research suggests that the higher rates of substantiated child physical abuse cases among families living in poverty may be due to greater severity of the injury, making it more obvious and easy to substantiate the reported cases (Gelles, 1992). Therefore, the higher rates of substantiation found among families living in poverty may be due to greater injury severity, not to bias. Furthermore, Arad (2001) found that harsher outcomes of investigations in child physical abuse cases were more dependent on the worker's assessment of the quality of life provided for the child by the family. Family poverty alone did not directly influence the decisions.

Some findings suggest that reporting bias has declined over recent years. Ards and Harrell (1993) compared the reporting of child physical abuse across the SES strata in 1980 and in 1986. Victims of child physical abuse from higher income families were "less likely than those from lower income families to be known to CPS [Child Protection Services] in 1980, but not in 1986" (Ards & Harrell, 1993, pp. 340). This finding may suggest that although a reporting bias may have been evident in the past (Hampton & Newberger, 1985; Pillitteri et. al., 1992; Turbett and O'Toole, 1983; Zellman, 1992), it has decreased as professional awareness of the bias has increased.

Sedlak & Broadhurst (1996), in the Executive Summary of the National Incidence Study of Child Abuse and Neglect, argue that the professionals who

identified the abused children in this study were likely to encounter children of all income levels. These professionals worked in hospitals, day-care centers, and schools, and included members of the public. In fact, workers in the public schools recognized the majority of incidents of maltreatment. Eighty-nine percent of the US population of school-aged children attend public school. On this basis, Sedlak and Broadhurst (1996) assert that the probability of a reporting bias due to availability is low, suggesting that the higher levels of child physical abuse reported in families living in poverty is not due to a reporting bias but in fact due to environmental factors associated with poverty.

Summary

There is considerable evidence to suggest that living in poverty is related to child physical abuse reporting and substantiation rates, whether the link is real or a result of bias in the reporting and investigation process. If the link between poverty and child physical abuse is due to bias in the reporting and investigation process, does this evidence indicate that the removal of Section 43 of the Criminal Code will result in the targeting by child protection system of families living in poverty who physically punish their children? Due to the complex nature of the relationship between child physical abuse and physical punishment, answering this question requires an examination of the association between poverty and physical punishment specifically, as well as an investigation of current reporting and substantiation patterns.

Poverty and Physical Punishment

Physical punishment is clearly a predictor of physical harm to children (Gershoff, 2002). Parents who use mild physical punishment are more likely to use

severe physical punishment to manage their children (Straus, 2000; Vasta, 1982). However, not all physical punishment results in injury and not all injuries are due to physical punishment. Some proportion –although a minority- of cases of physical abuse do not take place in a context of punishment. In North America, physical punishment is highly prevalent (Asdigian & Straus, 1997; Canadian Press & Leger Marketing, 2002; Giles-Sims, Straus & Sugarman, 1995; Straus, 2001; Straus & Stewart, 1999; Wauchope & Straus, 1990). Therefore, a closer examination of the relationship between poverty and physical punishment specifically, is warranted.

While the definition of physical punishment varies across research studies, it generally identifies an act of force used to cause physical discomfort or pain to correct a child's behaviour, to deter the child from repeating the behaviour, and/or to control the child. Physical punishment is operationalized by one of several measures such as the Conflict Tactics Scale (CTS; Straus & Hamby, 1997) or the Home Observation for Measurement of the Environment-Short Form (HOME-SF) Inventory (Caldwell & Bradley, 1979).

Some researchers have found that families living in poverty have higher rates of corporal punishment (Giles-Sims, Straus & Sugarman, 1995; Straus & Stewart, 1999; Youssef et. al., 1998). However, a number of studies have not found this relationship (Dietz, 2000; Erlanger, 1974; Straus, 2001; Tajima, 2000; Wolfner & Gelles, 1993) or have found an unclear relationship between family poverty indicators and use of physical punishment (Asdigian & Straus, 1997; Wissow, 2001; Xu, Tung, & Dunaway, 2000).

Evidence for a Link between Poverty and Physical Punishment

Youssef, Attia and Kamel (1998) found that Egyptian children in poor families are more likely to experience physical punishment than those that are not poor. They found that use of physical punishment increases as parental educational attainment and occupational prestige decreases, family income decreases and as family size and crowding index increases. They suggest that higher education may be linked to patterns of teaching, guiding and communicating with children that reduce the use of physical punishment and increase the use of more positive forms of discipline.

Using a national US sample, Giles-Sims, Straus and Sugarman (1995) found that the prevalence and chronicity of spanking, as measured using the HOME inventory (Caldwell & Bradley, 1984), were significantly related to poverty indicators. Specifically, they found that as SES increases, the prevalence of spanking decreases and, among those who spank, chronicity decreases as SES increases. For this study, SES was measured using an index of occupational status, family income and educational attainment. The authors propose that the stress and authoritarian parenting style associated with low income may help to explain these relationships. However, despite the differences found between the SES groups, a high percentage of mothers in all SES levels reported spanking their children.

Straus and Stewart (1999) examined a random sample of families in the United States. The prevalence, chronicity and severity of their use of physical punishment were measured using the Parent-Child Conflict Tactics Scales (CTSPC; Straus, Hamby, Finkelhor, Moore & Runyan, 1998). The SES of a family, as

measured by parental education and income, was found to be significantly related to prevalence of physical punishment. Unfortunately, although the study did examine the relationship between severity of injury and child age, no examination of the relationship between poverty indicators and severity of injury was conducted.

Evidence for No Link or Unclear Link between Poverty and Physical Punishment

Erlanger (1974), in an early review of the literature on poverty and parental use of corporal punishment, concluded that at best only a weak relation exists between poverty and use of physical punishment. Straus (2001) constructed a SES index which divides the families into ten categories based on parental education, occupational prestige, and household income. No significant differences in the use of corporal punishment were evident across these SES groups.

Similarly, Tajima (2000) found that family poverty characteristics, including number of children, years in the community, and income were not significant predictors of physical punishment. However, Tajima did find that parental stress was associated with an increased use of corporal punishment. Tajima distinguished between child physical abuse and physical punishment and found similar results for both types of violence.

Dietz (2000) distinguished between mild and severe corporal punishment. She found that parental use of mild corporal punishment was not significantly related to living in poverty. However, parents with incomes below the poverty line were more likely to use severe corporal punishment than those with incomes above the poverty line. However, when she altered the income measure to distinguish between high and

low income families, living in poverty no longer predicted severe corporal punishment. She found poverty indicators to predict the use of corporal punishment only in cases of severe poverty and concluded that physical punishment may be more strongly related to stress and coping than to absolute income levels (Dietz, 2000).

Wolfner and Gelles (1993) found no relationship between parental use of physical punishment and poverty. In fact, they found that parents with the lowest incomes and those with the lowest levels of education reported the lowest rates of physical punishment. However, they found that income, employment status and education were related to severe violence rates. Their results suggest that while severe violence may be related to poverty indicators, milder acts of violence are not.

Wissow (2001) found an unclear relationship between poverty and physical punishment. He found that income and education were not linearly related to the use of physical punishment. The greatest proportion of families using physical punishment was found among those having incomes between $20,000 and $30,000 and high school educations, with lesser percentages among higher and lower income and education groups. Using logistic regression, Wissow found that parental income and education were not significantly related to use of physical punishment. Unfortunately, this study was unable to distinguish measures of physical punishment severity.

Using the minor violence scale of the CTS, Asdigian and Straus (1997) found that, after controlling for other poverty indicators such as educational attainment of the parents, occupational prestige and family income, family size was significantly related to the prevalence of physical punishment. However, when the additional

poverty indicators were not controlled for, the relationship between family size and prevalence of physical punishment was not significant.

Summary

A relationship may exist between poverty and reporting and substantiation of severe violence, but a relationship between poverty and milder violence has not been reliably established. Furthermore, the relationship between degree of family poverty and violence has also not been reliably established. It is unclear if a relationship between poverty and physical punishment would exist if injury to the child is held constant. In the present study, an examination was made of a large sample of reported cases of physical punishment in an attempt to determine whether a link could be found between poverty indicators and physical punishment and whether substantiation and case outcomes are related to poverty indicators if the presence of physical harm to the child is held constant.

Purpose of the Present Study

The purpose of the present study was to assess the relationship between poverty indicators and the substantiation and placement outcomes of physical punishment cases in Canada. The relative contributions of poverty indicators and presence of physical harm suffered by the child in professional decision-making will be examined. In addition, the influence of the degree of family poverty on decision-making will be examined. The specific research questions were: 1) are family poverty indicators significant predictors of substantiation rates and placement decisions in physical punishment cases if physical harm suffered by the child is controlled?, and 2) does the number of poverty indicators within a family significantly predict

substantiation rates and placement decisions in physical punishment cases if physical harm to the child is controlled

Hypothesis

On the basis of a number of studies finding no relationship between poverty indicators and physical punishment, it was hypothesized that family poverty indicators would not predict substantiation rates and case outcomes whether or not physical harm is suffered by the child (Arad, 2001; Ards & Harrell, 1993; Gelles, 1992; Sedlak & Broadhurst, 1996).

Significance of the Present Study

The present study examined a large sample of reported cases of physical punishment in Canada in an attempt to determine whether a link could be found between poverty, substantiation rates and case outcomes if injury to the child was held constant. It was predicted that the findings would demonstrate that the number of poverty indicators present would not significantly influence case outcomes when physical harm is controlled. It also was predicted that poverty indicators would not be significant predictors of substantiation rates and case outcomes when physical harm is controlled. The findings of this study have implications for the ongoing development of policy aimed at reducing potential bias in child protection agencies and reducing the use of physical punishment in Canada.

CHAPTER II

Method

Sample

A nationally representative sample of families referred to child welfare agencies due to suspected physical abuse was drawn from the 1998 Canadian Incidence Study of Reported Child Abuse and Neglect (CIS).

The CIS

The CIS is the first nationwide study to examine the characteristics of children and families investigated by Canadian child welfare services. A multistage sampling technique was used to select a representative sample of 51 child welfare service areas across Canada. One child welfare agency was randomly selected from each service area and the investigations conducted by the agency over a three-month period were tracked. The study includes substantiated and unsubstantiated child welfare investigations, but does not include reports that are screened out before the investigation or cases that are only investigated by the police. Thus, the study does not include cases of child maltreatment that were not reported to child welfare services. Therefore the sample may have bias already built into it by not including those cases of abuse not reported. However, the purpose of this study is to assess the bias within the system. No conclusions will be made on biases within the greater society or on reporting biases based on the present study.

All duplicate reports were removed and a two-step weighting process, annualization and regionalization, was applied to derive national estimates of the annual incidence rate and the characteristics of investigated child maltreatment in

Canada (Trocmé et al., 2001). Information was collected about reported children and their families directly from child welfare workers via a three-page Maltreatment Assessment form.

The national estimates presented in this study are child-based, not family-based. Therefore, if more than one child in a family was undergoing an investigation during the sampling period, the family could be included in the sample more than once. It was a concern that the family variables of families with more than one child under investigation during the sampling period may become inflated. However, the issue of non-independence of the data was not a problem in this study as replicate weights in the Westvar Statistical program were used, thus accounting for an ultimate clustering effect (R. William, personal communication, May 17, 2004).

The Present Sample

For the purposes of this research, a sub-sample of the CIS was drawn. Only those cases in which the primary maltreatment classification was inappropriate physical punishment were included in the analysis. Of these cases, only those in which the alleged perpetrator was the biological or step-parent and was the primary or secondary live-in caregiver were included in the analysis. After selecting these cases, the final sample size was 5704.

Measures

In the present study, an attempt was made to assess the influence of the number of poverty indicators within a family and the relative contributions of family poverty indicators to professionals' decision-making in reported cases of physical punishment in Canada.

Outcome Variables

Professionals' decision-making was operationalized by several measures indicating 1) whether the report was substantiated and 2) the types of interventions made during the investigation.

Substantiation of reported cases

In the CIS dataset, a case is considered substantiated if the child welfare worker considers that evidence indicates that abuse has occurred. Cases were labeled as 'suspected' if there was not enough evidence to substantiate maltreatment, but the suspicion remained that maltreatment had occurred. Cases were labeled 'unsubstantiated' if there was sufficient evidence to conclude that no maltreatment had occurred. The worker indicated whether the report had been substantiated, unsubstantiated or unsubstantiated but remained suspected. In the present study, suspected cases and unsubstantiated cases were collapsed into 'unsubstantiated," as the cases in both of these categories were unsubstantiated at the time of the data collection. This created a dichotomous (substantiated/unsubstantiated) variable.

Ongoing child welfare services

The investigating workers were asked to indicate whether the case would be closed or remain open for ongoing child welfare services after the initial investigation. "Unknown" cases were treated as missing data.

Child and Family Referrals

The CIS recorded all referrals made to specified programs within or external to the child welfare agency. These include family preservation/reunification programs, parent support programs, other family/parent counseling, drug/alcohol

counseling, welfare/social assistance, food bank, shelter services, domestic violence

counseling, psychiatric/psychological services, special education referral, recreational

program, victim support program, medical/dental services, other child counseling, and

any other child or family focused referral. In the present study, a dichotomous

variable (referral/no referral) was constructed for child and family referrals.

Out-of-Home Placement

The CIS tracked whether children were placed in out-of-home care following

the initial investigation. They indicated whether no placement was required,

placement was being considered, an informal placement was arranged (i.e. kinship

care), or the child was placed in child welfare care (i.e. foster care, group home,

secure treatment etc). In the present study, a dichotomous variable was constructed.

"Placement" included cases of informal placement and placement in child welfare

care. "No placement" included cases in which no placement was required. There

were very few cases (18) in which placement was still being considered at the time of

the data collection. Therefore, these cases were deleted from the sample.

Application to Child Welfare Court

Applications can be made to child welfare courts for an order of supervision,

temporary wardship or permanent wardship. The CIS tracked the number of cases in

which applications were made or were considered. In the present study, a

dichotomous variable, 'application/no application to child welfare court', was

constructed. Cases in which applications had been considered but not made were

classified as 'no application made'.

Police Involvement

Workers recorded whether a police investigation had been initiated during the child welfare investigation. For the present study, a dichotomous 'police investigation/no police investigation' variable was constructed.

Predictor Variables

Due to the lack of an agreed-upon definition of poverty in the literature, measurement of this variable is inconsistent across studies (Bronstein, Hahn, Suwalsky, & Haynes, 2003). However, most researchers agree that income, consumption, education, access to safe housing and family size are important indicators of poverty (Sarlo, 2001). Due to the limitations of the CIS dataset, not all the indicators of poverty could be measured in the present study. The income variable in this dataset is based on the workers' estimate of the family income, not objective data. Furthermore, for 31.1% of the cases in the sample no estimate was provided. Therefore, this variable was not included in this study. Household education, family size and three additional variables, as well as a poverty indicator index, were used in the present study as indicators of poverty. Therefore, it should be noted that these measures are indicative of living in poverty, and do not fully represent poverty.

Social assistance

A measure of low household income was obtained by examining whether social assistance was the primary source of household income. To qualify for social assistance in Canada, a household undergoes a budgetary assessment, which takes into account both the household's basic needs and the resources available to meet them. A deficit between assessed needs and available resources qualifies the

household for social assistance. The amount of assistance allocated depends on the household's budgetary deficit, employability status, and family status and size, subject to a maximum amount (Government of Canada, 2004). In the CIS, workers recorded whether social assistance was the primary income source of each of the primary caregivers in the family. In the present study, families in which either or both caregivers received social assistance were given a score of one; families in which neither caregiver received social assistance were given a score of zero.

Public housing

The investigating worker assessed the family's housing accommodations and noted whether the family lived in public housing. Public housing is granted to those families receiving social assistance and in need of housing. For the present study families living in public housing were assigned a score of one, those families not living in public housing were assigned a score of zero.

Household educational level

The educational levels of the primary caregivers were recorded by the CIS investigating worker: elementary or less, secondary or less, college/university, or unknown. In the CIS, a household educational level variable with similar categories was constructed using the same categories. This household educational level variable will be used in the present study. This variable was selected because in the literature it is stated that the education levels of all the caregivers should be included as an indicator of poverty (Herrenkohl, 1995). This is an ordinal level variable. Logistic regression assumes interval level independent variables. Therefore, dummy variables were constructed. For dummy variable one, elementary or less is given a score of 1

and other others are given a score of 0. For dummy variable two, secondary school or less is given a score of one and all others is given a score of 0.

Family size

Researchers have demonstrated that having three or more children in one family is indicative of large family size (Brown, Cohen, Johnson, & Salzinger, 1998). For the present study, a dichotomous variable were constructed to indicate large family size. Having three or more children in the family will be representative of large family size and less than three children will be indicative of small family size.

Unsafe housing conditions

CIS investigators were are asked whether, in their opinion, the children in the household were at risk for injury or impairment due to, for example, broken windows, insufficient heat, or parents and children sharing a single room. Families living in unsafe housing were assigned a score of one. Those not living in unsafe conditions were assigned a score of zero.

Poverty indicator index

A poverty indicator index was constructed using all the predictor variables. Families were assigned a score based on the number of poverty indicators present in the family. Families with a household education of some college or above and no additional poverty indicator present were assigned a score of zero. Every additional poverty indicator evident in the family was noted by adding a point to the families' score. The scale ranged from one to five. The scoring of poverty indicator index does not suggest that a family receiving a score of two is twice as poor as a family receiving a score of one. It simply denotes the number of poverty indicators present

within the family household. A family receiving a score of two has twice as many poverty indicators in the household as a family receiving a score of one. Therefore, this variable was treated as continuous.

Control Variable – Physical Harm

There is some evidence that family poverty indicators and degree of harm to the child may be related (Gelles, 1992; Dietz, 2000). Therefore, the relationship between poverty and investigation outcomes may be confounded by the degree of harm sustained by the child. In the present study, physical harm to the child was controlled in the analysis to provide a more valid estimate of the contribution of the poverty indicator variables to professionals' decision-making in cases of physical punishment. The CIS used non-standardized scales that reflected the investigating workers' assessment of the physical harm sustained by the child. Physical harm was noted in 13% of the cases. Bruises cuts or scrapes were the most common degree of injury, 8.2% of the cases. Burns and scalds were the next most common, noted in 0.6% of the cases. Broken bones and head trauma were equally common, noted in 0.5% of the cases. Finally, fatalities were noted in only 0.2% of the cases.

Data Analysis

The predictive power of the poverty indicators and the poverty indicator index was assessed through logistic regression analyses. Several assumptions must be met in order to conduct logistic regression (Wright, 1995). First, it is assumed that the dependent variables are dichotomous. This assumption was met. Second, the outcomes of the dependent variables must be statistically independent; a single case can be represented in the set only once. In the CIS dataset, all duplicate reports were

removed and a weighting process was applied (Sedlak & Winglee, 2001). Third, all relevant predictors must be included. In practice, this assumption of specificity is rarely met (Wright, 1995). However, this study does include the most important predictor variables identified in the literature. Finally, it is assumed that a minimum of 50 cases per predictor variable is present for the application of logistic regression. This assumption was met.

Another concern for studies based on regression analysis is multi-collinearity of the predictor variables; that is, the categories under analysis must be mutually exclusive and collectively exhaustive. Tests of association among the predictor variables were conducted. The associations between dichotomous variables were measured using the chi square test (Jackson, 2003). However, even though chi square tests may show statistically significant associations between two variables, the relationship between those variables may not be substantively important – particularly in the case of large data sets. Therefore, Phi was used to estimate the <u>strength</u> of the associations among the variables that were found to be significant in the Chi-Square tests. A Phi score of 0.5 or less was considered to indicate a strong association.

Design Effect

The CIS used a multistage sampling technique, randomly sampling groups of the Canadian population. The data were then weighted to adjust the sample to known population parameters. Any probability sample other than simple random sampling produces a design effect that complicates the computation of standard errors (Sedlak & Winglee, 2001). The influence of case weights and multistage sampling on the

sampling variance is summarized by the design effect. The CIS dataset was not self-weighting; all cases did not receive equal weight. This increased the design effect. To alleviate the complications associated with the sampling techniques used in the CIS, it was essential to use a specialized statistical software package, such as WesVar, when conducting any analysis with the CIS dataset. Using WesVar, replicate weights were constructed. A number of subsamples were selected from the main sample and then the variability among these replicate estimates was used to compute the standard error of the overall sample estimate. WesVar recognized the replicate weights and automatically applied them when computing statistical tests. Therefore, WesVar was used to carry out the present analysis.

CHAPTER III

Results

Frequencies

Tables 1 and 2 present the frequencies for all of the outcome and predictor variables. The total sample size for the study was 5704 reports. Of these, approximately one half were substantiated. The majority of investigations did not lead to ongoing child welfare services. However, the majority of investigations did lead to child and family referrals. Most cases did not result in out of home placement or applications to child welfare court. However, it should be noted that on the child welfare court variable, almost one third of the cases had missing data. Police were involved in a minority of cases.

Approximately one-half of the families were receiving social assistance as their primary form of income. The majority of families did not live in public housing. The modal household education level was some high school or less. The majority of families had fewer than three children and most lived in safe housing. The majority of children investigated did not have any physical harm noted by the investigating worker.

Of those cases for which all the data were available, (53.3% of cases), most had two or fewer poverty indicators present. In Wesvar, any observation having a missing value in the modal is excluded from the analysis. Therefore, the poverty index was missing 46.7% of the total sample. The majority of missing cases came from the education variable. Therefore, a second index without education was constructed. This variable was run in all the same regressions as the complete poverty

Table 1

Frequencies for Outcome Variables

Outcome Variable	Frequency	% of total sample	% of non-missing cases
Substantiation			
Yes	2819	49.4%	59.7%
No	1906	33.4%	40.3%
Missing	979	17.2%	
Ongoing Child Welfare Services			
Yes	2042	35.8%	36.6%
No	3538	62.0%	63.4%
Missing	124	2.2%	
Child and Family Referrals			
Yes	3669	64.3%	64.3%
No	2035	35.7%	35.7%
Missing	0		
Out of Home Placement			
Yes	941	16.5%	17.2%
No	4543	79.6%	82.8%
Missing	220	3.9%	
Application to Child Welfare Court			
Yes	215	3.8%	5.5%

No	3710	65.0%	94.5%
Missing	1779	31.2%	
Police Involvement			
Yes	687	12.0%	13.6%
No	4362	76.5%	86.4%
Missing	655	11.5%	

Table 2

Frequencies for Predictor Variables and Control Variable

Predictor Variable	Frequency (%)	% of non-missing sample
Social Assistance		
Yes	2597 (45.5%)	
No	3107 (54.5%)	
Missing	0	
Public Housing		
Yes	611 (10.7%)	
No	5093 (89.3%)	
Missing	0	
Household Education		
Some College or University	706 (12.4%)	21.2%
Some High School	2326 (40.8%)	69.7%
Some Elementary or Less	303 (5.3%)	9.1%
Missing	2369 (41.5%)	
Family Size		
Three or more children	2138 (37.5%)	
Less than three children	3566 (62.5%)	
Missing	0	
Unsafe Housing		
Yes	1609 (28.2%)	32.5%

No	3337 (58.5%)	67.5%
Missing	758 (13.3%)	
Poverty Index		
0	265 (4.6%)	
1	791 (13.9%)	
2	960 (16.8%)	
3	727 (12.7%)	
4	284 (5.0%)	
5	14 (0.2%)	
Missing	2663 (46.7%)	
Control Variable		
Harm Present		
Yes	728 (12.8%)	
No	4976 (87.2%)	

index. The results were not substantively different. Therefore, the results using the

full poverty index are justified despite of the large number of missing cases.

Results of Regression Analyses

Chi square tests of association among the predictor variables (see Table 3)

demonstrated that household education was associated with living in public housing,

unsafe housing conditions and whether the family received social assistance. Living

in public housing and living in unsafe housing were both associated with the family

receiving social assistance. However, none of the Phi coefficients met the 0.5 criterion

(see Table 4); in fact, none exceeded 0.2. Therefore, the predictor variables were

assumed to not be strongly associated and multicollinearity was not a concern.

Results of Logistic Regression Analyses

Substantiation

Together, the five predictor variables accounted for 5.7% of the variance in

the substantiation variable when there was no evident harm to the child (see Table 5).

The five predictor variables accounted for 2.5% of the variance in the Substantiation

variable when there was evident harm to the child (see Table 5). Unsafe housing was

the only predictor variable with a significant F value ($p < .01$) whether harm was or

was not evident. In a separate analysis, the magnitude of the Poverty Index did not

affect the likelihood of substantiation (odds ratios = 0.57 and 0.60 for conditions of

no harm and harm, respectively).

Table 3

Chi Square Values

	Education	Public Housing	Large family size	Unsafe Housing
Public Housing	7.273*			
Large family size	2.445	5.289		
Unsafe Housing	7.871*	0.613	0.080	
Social Assistance	88.253***	32.351***	0.752	61.729***

* $p<.05$
** $p<.01$
*** $p<.001$

Table 4

Cramer's Phi Values

	Education	Public Housing	Large Family Size	Unsafe Housing
Public Housing	0.047			
Large Family Size	N/A	N/A		
Unsafe Housing	0.055	N/A	N/A	
Social Assistance	0.163	0.075	N/A	0.112

N/A-Cases in which Chi Square Value was not significant

Table 5

Substantiation

	No Harm		Harm	
N	3598		3529	
Cox-Snell	0.057		0.025	
	F Value	Odds Ratio	F Value	Odds Ratio
Family Size	3.180	1.26	0.087	0.94
Elementary Education	0.99	1.17	0.140	0.78
Secondary Education	0.114	1.07	0.504	0.73
Public Housing	0.931	1.36	0.200	0.80
Social Assistance	0.198	1.10	0.249	0.87
Unsafe Housing	64.258***	3.35	6.629***	2.19

* $p < .05$
** $p < .02$
*** $p < .01$

Ongoing Child Welfare Services

Together, the five predictor variables accounted for 4.5% of the variance in the Ongoing Child Welfare Services variable when there was no evident harm to the child (see Table 6). The five predictor variables accounted for 3.9% of the variance in the Ongoing Child Welfare Services variable when there was evident harm to the child (see Table 6). Public housing and unsafe housing and secondary education had a significant F value ($p < .01$) in cases where there was no evident harm. In cases where harm was evident, only elementary and secondary education had significant F values ($p < .05$ and $p < .01$ respectively). In a separate analysis, the magnitude of the Poverty Index did not affect the likelihood of ongoing child welfare services, whether or not harm to the child was evident (odds ratios = 0.82 and 0.85 under conditions of no harm and harm, respectively).

Child and Family Referrals

Together, the five predictor variables accounted for 5.8% of the variance in the Child and Family Referrals variable when there was no evident harm to the child (see Table 7). The five predictor variables accounted for 2.8% of the variance in the Child and Family Referrals variable when harm to the child was evident (see Table 7). Unsafe housing was the only predictor variable with a significant F value ($p < .01$ – no harm evident). In cases where harm was evident, no predictor variables had significant F values. In a separate analysis, the magnitude of the Poverty Index did not affect the likelihood of child and family referrals, whether or not harm to the child was evident (odds ratios = 0.72 and 0.97 under conditions of no harm and harm, respectively).

Table 6

Ongoing Child Welfare Services

	No Harm		Harm	
N	4332		614	
Cox-Snell	0.045		0.039	
	F Value	Odds Ratio	F Value	Odds Ratio
Family Size	0.532	1.07	0.090	1.08
Elementary Education	0.374	1.26	4.888*	4.33
Secondary Education	8.054***	1.60	9.829***	2.47
Public Housing	12.066***	2.27	0.015	0.96
Social Assistance	3.654	1.24	1.852	0.74
Unsafe Housing	13.175***	1.59	0.702	0.82

* p<.05
** p<.02
*** p<.01

Table 7

Child and Family Referrals

	No Harm		Harm	
N	4332		614	
Cox-Snell	0.58		0.28	
	F Value	Odds Ratio	F Value	Odds Ratio
Family Size	0.024	1.03	3.231	0.67
Elementary Education	0.387	1.22	0.590	1.69
Secondary Education	0.074	1.09	1.048	1.86
Public Housing	0.701	1.22	1.668	0.60
Social Assistance	0.025	1.04	0.056	0.92
Unsafe Housing	53.719***	3.19	0.302	1.50

* p<.05
** p<.02
*** p<.01

Out of Home Placement

Together, the five predictor variables accounted for 2.4 of the variance in the out of home placement variable when there was no evident harm to the child (see Table 8). The five predictor variables accounted for 4.3% of the variance in the Placement variable when there was evident harm to the child (see Table 8). In cases in which there was no evident harm, unsafe housing was the only predictor variable with a significant F value ($p < .01$). In cases where there was evident harm, no predictor variables had a significant F value. In a separate analysis, the magnitude of the Poverty Index did not affect the likelihood of out of home placements, whether or not harm to the child was evident (odds ratios = 0.71 and 0.97 under conditions of no harm and harm, respectively).

Application to Child Welfare Court

Together, the five predictor variables accounted for 2.9% of the variance in the application to child welfare court variable when there was no evident harm to the child (See Table 9). The five predictor variables accounted for 5.2% of the variance in the Placement variable when there was evident harm to the child (See Table 9). In cases where there was no evident harm, there were no predictor variables with a significant F value. In cases where there was evident harm, secondary education was the only predictor variable with significant F values ($p < .01$). In a separate analysis, the magnitude of the Poverty Index did not affect the likelihood of applications to child welfare court, whether or not harm to the child was evident (odds ratios = 0.57

Table 8

Out of Home Placement

	No Harm		Harm	
N	4284		603	
Cox-Snell	0.024		0.43	
	F Value	Odds Ratio	F Value	Odds Ratio
Family Size	2.914	0.75	4.084	0.52
Elementary Education	0.811	1.47	0.104	1.30
Secondary Education	0.532	1.20	0.000	0.99
Public Housing	2.276	1.45	3.999	1.97
Social Assistance	1.339	1.32	0.028	1.06
Unsafe Housing	11.919***	2.20	2.665	1.79

* p<.05
** p<.02
*** p<.01

Table 9

Application to Child Welfare Court

	No Harm		Harm	
N	3067		384	
Cox-Snell	0.029		0.052	
	F Value	Odds Ratio	F Value	Odds Ratio
Family Size	0.104	1.17	0.126	1.26
Elementary Education	0.610	0.47	2.797	3.99
Secondary Education	0.977	2.44	15.840***	12.81
Public Housing	0.025	1.09	0.343	0.68
Social Assistance	2.369	1.91	0.016	1.10
Unsafe Housing	4.017	2.96	0.465	1.99

* p<.05
** p<.02
*** p<.01

and 0.60 under conditions of no harm and harm, respectively).

Police Involvement

Together, the five predictor variables accounted for only 0.8% of the variance in the Police Involvement variable when there was no evident harm to the child (see Table 10). The five predictor variables accounted for 4.8% of the variance in the Police Involvement variable when there was evident harm to the child (see Table 10). In cases with no evident harm, no predictor variables to had significant F values. In cases with evident harm, public housing and unsafe housing were the only predictor variables with significant F values ($p < .02$). In a separate analysis, the magnitude of the Poverty Index did not affect the likelihood of police involvement, whether or not harm to the child was evident (odds ratios = 0.89 and 1.30 under conditions of no harm and harm, respectively).

Table 10

Police Involvement

	No Harm		Harm	
N	3833		556	
Cox-Snell	0.008		0.048	
	F Value	Odds Ratio	F Value	Odds Ratio
Family Size	2.896	1.51	0.004	1.953
Elementary Education	0.336	0.67	1.705	1.446
Secondary Education	0.233	1.16	0.418	2.014
Public Housing	0.922	0.76	7.171**	3.441
Social Assistance	0.219	0.91	2.527	1.160
Unsafe Housing	0.186	0.90	6.848**	0.848

* p<.05
** p<.02
*** p<.01

CHAPTER IIII

Discussion

The purpose of this study was to assess the relationship between poverty indicators and substantiation rates and investigation outcomes in reported cases of physical punishment in Canada. On the basis of previous literature, it was hypothesized that family poverty indicators would not predict substantiation rates or investigation outcomes. The findings of this analysis of the CIS data set support this hypothesis; substantiation rates and investigation outcomes were not substantively explained by family poverty indicators.

Previous research suggests that living in poverty is associated with higher levels of child physical abuse (Gelles, 1992; Sedlak & Broadhurst, 1996; Zuravin, 1989). Two divergent explanations for this apparent relationship have been proposed. The first is that the correlates of poverty - such as stress, approval of and use of corporal punishment and a greater tendency toward authoritarian parenting - increase the risk of violence toward children in poor families. The second explanation is that this apparent relation is spurious - the result of bias in the research and practice. The relationship between poverty and parent-to-child aggression is even less clear when the act is less violent and does not result in lasting harm to the child. The literature to date has not yielded clear findings on the relationship between physical punishment and poverty. The aim of the present study was to address this question using a large and nationally representative sample of cases reported to the Canadian child welfare system. If poverty was found to be associated with substantiation of these cases or with professionals' decision-making about their disposition, this could provide

evidence that poor families reported to child welfare agencies are more likely to be targeted for social work or police involvement.

The findings of the present study indicate that professional decision-making in cases of physical punishment is not substantively explained by even the most obvious indicators of poverty – household education level, living in public housing, social assistance as the primary source of income, unsafe housing or family size. Even when all of these indicators are considered together, only 5.7% of the variance in substantiation rates is accounted for when the child has not been injured; 2.5% of the variance in substantiation rates is accounted for when the child has been injured.

Unsafe housing was a significant predictor variable for substantiation (p< .01), ongoing child welfare services (p< .01 – no harm), child and family referrals (p< .01 – no harm), out of home placements (p< .01 – harm), and police involvement (p< .02 – harm). However, overall the predictor variables did not explain a substantial amount of the explained variance of the outcome variables. This finding may indicate that although professional decision-making is not substantively explained by the indicators of poverty measured in this study, unsafe housing is the most significant predictor variable for the majority of the outcome variables.

None of the case disposition outcomes was substantively influenced by the poverty indicators. Therefore, there is little data to suggest that child welfare workers base their decisions on any given poverty indicator. To examine this issue further, a Poverty Index was constructed to determine whether workers might make different decisions on the basis of the "total picture" – that is, would the influence of poverty indicators be greater when the family's life circumstances were considered

simultaneously, rather than one at a time? The Poverty Index was a measure of the total number of poverty indicators present in a family.

No evidence was obtained that indicates that the number of poverty indicators present has any substantive influence on investigation outcomes. The likelihood of substantiation or any of the disposition outcomes was not increased at all by the number of poverty indicators present. Only in the case of police involvement did the odds ratio exceed 1.00 (it was 1.30). A closer look at the individual poverty indicators reveals that family size was the strongest predictor of police involvement in cases where the child had not been injured (F value significant at $p < .05$ and odds ratio = 1.83). Public housing was the strongest predictor of police involvement where the child had been injured (odds ratio = 1.16).

Limitations of the Present Study

A limitation of the present study is that a measure of family income could not be obtained. The income variable in the CIS dataset was based on case workers' perceptions of family income, rather than on objective and validated information. Further, in more than 50% of the cases, this information was not recorded. As a result, income could not be included as a variable in the present study and the poverty index constructed did not include a measure of income. While social assistance and public housing were included in the index as proxy measures of income, without an accurate measure of income, the validity of the poverty index may be questioned.

A second limitation is that the CIS collected data on cases of physical punishment that had already been reported. Therefore, it was not possible to assess whether bias exists in the reporting process itself. While there was little evidence of a

link between poverty and investigations outcomes, it is possible that poor families are overrepresented in the sample as a result of reporting bias.

A third limitation is the definition of physical harm used in the present study. This appears to be an important variable in the literature on poverty and physical abuse (Dietz, 200; Straus and Stewart, 1999). In the present study, physical harm was measured following the report of the incident. It is possible that visible physical harm had healed by the time the investigating worker completed the child's record or that the worker was unaware of harm that had occurred. Further, it is possible that workers are not always accurate in assessing harm, perhaps due to potential habituation to seeing harm in the many cases that they investigate. Workers whose assessments of harm are affected by these factors may make different decisions than those whose assessments are more accurate.

Further, emotional harm was not measured in the present study. Workers' decisions might have been influenced by the degree of emotional distress experienced by the child. The study may have been improved by the use of a scaled degree of physical harm to the child. This may have provided a more complex analysis of the influence of poverty indicators on professional decision-making at various degrees of physical harm to the child. Unfortunately, this was not possible, given the few cases of severe injury in the sample.

A fourth limitation is that cases that were labeled as suspected and cases labeled as unsubstantiated were collapsed into "unsubstantiated'. This was done because at the time of the data collection the suspected cases were not substantiated. However, the cases labeled as suspected may have been substantiated later.

Unfortunately, there was no way to discover whether the suspected cases were or were not substantiated. However, as only a small proportion of cases, 17% of the total sample, were labeled as "suspected", it is unlikely that these cases influenced the final outcomes substantially.

A fifth limitation of the study is the possible over-representation of families in which more than one child from the family was under investigation during the sampling period. However, the issue of non-independence of the data was not a substantial problem in this study as replicate weights in the Westvar Statistical program were used, thus accounting for an ultimate clustering effect (R. William, personal communication, May 17, 2004).

Finally, some of the variables within the dataset were based on the case workers' perceptions, rather than objective information. While these subjective measures could be seen as constituting a limitation of research on the relationship between poverty and investigation outcomes, in this case these measures are appropriate, as the study's focus was on the question of whether poor families might be targeted for more severe outcomes in physical punishment cases, which is a question of workers' perceptions.

Areas for Future Research

The findings of the present study suggest that the family's living conditions (i.e., unsafe housing) may play a role in professional decision-making in the absence of physical harm to the child. This finding may indicate that workers consider the child's safety beyond the actual reported incident itself when making decisions. Further information on this issue would be useful. For example, how is the child's

overall safety assessed in these cases? Moreover, if these factors are considered, to what extent are workers' decisions based on the parent's act versus the physical and social context within which the family lives?

The findings of the present study suggest there is little evidence of a link between poverty and investigation outcomes. The poverty indicators did not account for a significant proportion of the explained variances of any of the outcome variables. This raises the question of what variables do account for a significant portion of the explained variance of the outcome variables. Are workers' decisions based primarily on the nature of the parental act, the degree of physical or emotional injury to the child, the perceived safety of the child, reporter characteristics, the ethnicity of the family, or other factors?

This study provides support for the claim that poverty is not directly associated with the outcomes of professional decision-making within the child welfare system. However, due to the limitations of the CIS dataset, this study could not provide any information on whether poverty is associated with reporting of physical punishment in Canada. Such data would be useful.

Conclusions

It has been suggested that if Section 43 of the Criminal Canada were repealed, that families living in poverty would be unfairly targeted by the child welfare system. This argument is based on an assumption that families living in poverty are more likely to have allegations against them substantiated and to receive harsher outcomes of investigations based on professional decision-making than families who are not living in poverty. However, the findings of the present study suggest that workers'

perceptions of the families' poverty status do not significantly influence the investigation outcomes in child physical punishment cases in Canada. Thus, on the basis of this study's findings, there is no evidence to support the belief that repeal of Section 43 of the Criminal Code would result in discriminatory actions toward families living in poverty.

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